

## PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS ISO 9001: 2015 Certified

## NOTICE

## Date: 21st July, 2023

			B.Sc.(Info	ormation Techn	ology)				
S.Y.B.Sc.(T.T.) Sem III & T.Y.B.Sc.(I.T.) Sem V PCT Examination Syllabus AUGUST - 2023									
SR. NO.	NAME OF THE FACULTY	SEMESTER	SUBJECT	MODULE	TOPICS COVERED				
1	Apeksha Shirke	III	DATA STRUCTURE	UNIT 1	Introduction: Data and Information, Data Structure, Classification of Data Structures, Primitive Data Types, Abstract Data Types, Data structure vs. File Organization, Operations on Data Structure, Algorithm, Importance of Algorithm Analysis, Complexity of an Algorithm, Asymptotic Analysis and Notations, Big O Notation, Big Omega Notation, Big Theta Notation, Rate of Growth and Big O Notation. Array: Introduction, One Dimensional Array, Memory Representation of One Dimensional Array, Traversing, Insertion, Deletion, Searching, Sorting, Merging of Arrays, Multidimensional Arrays, Memory Representation of Two Dimensional Arrays, General Multi- Dimensional Arrays, Sparse Arrays, Sparse Matrix, Memory Representation of Special kind of Matrices, Advantages and Limitations of Arrays.				
2	Apeksha Shirke	III	OPERATING SYSTEMS	UNIT 1	Objectives and functions, Evolution. Achievements				
3	Aditi Save	III	PYTHON PROGRAMMING	UNIT 1	Introduction: The Python Programming Language, History, features, Installing Python, Running Python program, Debugging : Syntax Errors, Runtime Errors, Semantic Errors, The Difference Between Brackets, Braces, and Parentheses Variables and Expressions Values and Types, Variables, Variable Names and Keywords, Type conversion, Operators and Operands, Expressions, Interactive Mode and Script Mode, Order of Operations. Conditional Statements: if, if-else, nested if –else Looping: for, while, nested loops Control statements: Terminating loops, skipping specific conditions				

4	Sujal Shah	III	APPLIED MATHEMATICS	UNIT 1	Types and operations on Matrices, Matrix Multiplication, Inverse of a Matrix, Eigen Values, C-H theorem, Complex numbers
5	Tejaswini Parab	III	COMPUTER NETWORKS	UNIT 1	Unit I:- Introduction: Computer Network, Evolution of Computer Networks, Different types of Computer Network, Difference between LAN, MAN and WAN, Hardware Devices used for Networking: Network Interface Card (NIC), Modem, Hub, Switch L1 and L2 switches, Comparison between switch and hub, Bridge, Router, Gateway. Standards and administration. Network Models: Protocol layering, TCP/IP protocol suite, The OSI model.
1	Smita Kankee	V	ENTERPRISE JAVA	UNIT 1	Understanding Java EE: What is an Enterprise Application? What is java enterprise edition? Java EE Technologies, Java EE evolution, Glassfish server Java EE Architecture, Server and Containers: Types of System Architecture, Java EE Server, Java EE Containers. Introduction to Java Servlets: The Need for Dynamic Content, Java Servlet Technology, Why Servlets? What can Servlets do? Servlet API and Lifecycle: Java Servlet API, The Servlet Skeleton, The Servlet Life Cycle, A Simple Welcome Servlet Working With Servlets: Getting Started, Using Annotations Instead of Deployment Descriptor. Working with Databases: What Is JDBC? JDBC Architecture, Accessing Database, The Servlet GUI and Database Example.
2	Rupali Mishra	V	ADVANCED WEB PROGRAMMING	UNIT 1	Introducing .NET: The .NET Framework, C#, VB, and the .NET Languages, The Common Language Runtime, The .NET Class Library. The C# Language: C# Language Basics, Variables and Data Types, Variable Operations, Object-Based Manipulation, Conditional Logic, Loops, Methods. Types, Objects, and Namespaces: The Basics About Classes, Building a Basic Class, Value Types and Reference Types,
3	Aditi Save	V	ARTIFICIAL INTELLIGENCE	UNIT 1	Introduction: What is Artificial Intelligence? Foundations of AI, history, the state of art AI today. Intelligent Agents: agents and environment, good behavior, nature of environment, the structure of agents.

4	Niyati Kalyanpur	V	SOFTWARE PROJECT MANAGEMENT	UNIT 1	Introduction to Software Project Management:Introduction, What is a Project? Software Projects versus Other Types of Project, Contract Management and Technical Project Management, Activities Covered by Software Project Management, Some Ways of Categorizing Software Projects, Project Charter, Stakeholders, Setting Objectives, What is Management? Management Control, Project Management Life Cycle, Traditional versus Modern Project Management Practices. Project Evaluation and Programme Management: Introduction, Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost-benefit Evaluation Techniques, Risk Evaluation, Programme Management, Strategic Programme Management, Creating a Programme, Aids to Programme Management, Some Benefits Management. An Overview of Project Planning:Introduction to Step Wise Project Planning
5	Pooja Bendre	V	INTERNET OF THINGS	UNIT 1	An Overview, Design Principles for Connected Devices:, Internet Principles:, Thinking About Prototyping:
Jan.			SHaitas		
Ms. Rupali Mishra			Ms. Suonasiinii ivaikar		Prof. (Dr.) Digambar Ganjewar
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