



**PRAHLADRAI DALMIA LIONS COLLEGE
OF COMMERCE & ECONOMICS**

ISO 9001 : 2015 Certified

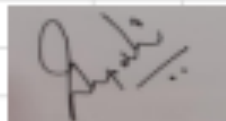
NOTICE

B.Sc.(Information Technology)

F.Y.B.Sc.(I.T.) Sem I , S.Y.B.Sc.(T.T.) Sem III & T.Y.B.Sc.(I.T.) Sem V PCT Examination Syllabus

SR. NO.	NAME OF THE FACULTY	SEM	SUBJECT	Syllabus
1	Ms. Sonia	I	Programming with C	Introduction: Algorithms, History of C, Structure of C Program. Program Characteristics, Compiler, Linker and preprocessor, pseudo code statements and flowchart symbols, Desirable program characteristics. Program structure. Compilation and Execution of a Program, C Character Set, identifiers and keywords, data types and sizes, constants and its types, variables, Character and character strings, typedef, typecasting
2	Ms. Mohini	I	Indian Knowledge System	1. Introduction to IKS (What is knowledge System, Characteristic Features of Indian Knowledge System) 2. Why IKS? (Macaulay's Education Policy and its impact, Need of revisiting Ancient Indian Traditions) 3. Scope of IKS (The Universality of IKS (from Micro to Macro), development form Earliest times to 18th Century CE)
3	Ms Neeti joshi	I	Environmental management & sustainable development	Unit-1 :History of Ecosystem, Structure and functions of Ecosystem, Food chain, Food web, Ecological succession, Levels of Biodiversity, Coservation of Biodiversity, Biogeographic zones of India, India as a Mega-Biodiversity Nation, Endangered and Endemic Species of india, Threats to Biodiversity, Ecosystem and Biodiversity services
4	Ms. Sneha	I	Entrepreneurship Management	Unit 1 : Introduction to Entrepreneurship - Introduction: Concept and importance of entrepreneurship, factors Contributing to Growth of Entrepreneurship, Entrepreneur and Manager, Entrepreneur and Intrapreneur, Types of Entrepreneurs
5	Mr. Prathamesh	I	Database Management System	Introduction to DBMS, Features, Advantages and Disadvantages, Data models, Levels of Abstraction, Er- model and Relationship, DBMS Architecture, Keys, Constraints, DDL commands, DML Commands, Clauses, Aggregate Functions
6	Ms. Sangeetta	I	Indian Constitution	Meaning of term constitution,Key elements of Constitution of India,Significance of Constitution, Sources of Indian Constitution,Preamble,Features of Constitution,Framework of Indian Constitution.
7	Ms. Aaliya	III	Python Programming	Basic Elements of Python Programming: Features of Python, Execution of a Python Program, Python Interpreter, Comments, IDLE, Data types, Dictionary, Sets, Mapping, Basic Elements of Python, Variables, Input Function, Output Statements, Command Line Arguments. Operators, Precedence of Operators, Associativity of Operators, Control Statements: The if statement, The if ... else Statement, The if ... elif ... else Statement
8	Ms. Sneha	III	Financial Literacy	Module 1: Essentials of Financial Literacy & Banking A. Introduction to financial literacy-Concept and Importance of Financial Literacy- Components of Financial Literacy: Income, Expenses, Savings, Investments, and Credit - Understanding Financial Decision-Making- Real-life Examples of Financial Success & Failures. B. Banking System & Digital Transactions- Functions of Banks & Types of Bank Accounts (Savings, Current, FD, RD)

9	Mr. Prathamesh	III	Data Structures	1. Introduction: Basic terminology: data, information, data structure, abstract data type (ADT) Classification of data structures: linear, non-linear Algorithm analysis: time complexity, Big O notation 2. Arrays and Linked Lists Array representation and operations (traversal, insertion, deletion, searching) Linked lists: singly linked lists (representation, insertion, deletion, traversal) Comparison of arrays and linked lists, advantages and disadvantages. 3. Stacks & Stack ADT: push, pop, peek operations Array implementation of stacks Applications of stacks: expression evaluation (infix to postfix conversion) 4. Recursion Concept of recursion, base case, recursive step 3. Sorting and Searching Sorting algorithms: bubble sort, insertion sort, selection sort Searching algorithms: linear search, binary search
10	Ms. Akshata	III	Applied Mathematics	Complex Number and Laplace Transformation definition
11	Ms. Sonia	III	Operating Systems	Operating System Overview: Basics of operating systems: Generations, Types, Structure, Services, System Calls, System Boot, System Programs, Protection and Security. Process Management: Process Concepts, Process States, Process Control Block, Scheduling-Criteria, Scheduling Algorithms and their Evaluation, Threads, Threading Issues.
12	Ms. Akshata	III	Statistical Methods	Definitions: Trial, random experiment, sample point and sample space, an event and different types of events: Different definitions of Probability: Classical (Mathematical), Empirical (Statistical) and Axiomatic definitions of Probability. Properties of probability Conditional probability. Independence of events, pairwise and mutual independence of three events. Theorems (with proof) and their applications: i. Addition theorem on probability for two and three events ii. Multiplication theorem on probability for two events. iii. Bayes' theorem.
13	Ms. Jyoti	V	Dot Net Core and Progressive Web Application	Common Language Runtime (CLR), Assemblies, Basics of C# Language: Data types, Variables, Operators, Expressions, Control Structures: If, Switch, Loops, Methods, Parameters, Error Handling Object Oriented Programming in C#: Classes & Objects, inheritance, Polymorphism, Interfaces, Namespaces and Exception Handling, ASP.NET Core Fundamentals: Web Server Basics, Middleware, Request Lifecycle, Routing, Controllers, Views (MVC), Razor pages and REST API endpoints, Web Forms
14	Mr. Sujal	V	Indian Knowledge Systems in Information Technology	Knowledge foundation, Relation of IKS to IT, Decimal Place value systems, Concept of Zero
15	Ms. Prachi	V	Artificial Intelligence and Application Development	Introduction to Artificial Intelligent, Generative Agents, Agentic AI Risks of AI, Benefits of AI, The Foundations of AI, The State of the Art.



Ms. Rupali Mishra
Coordinator



Ms. Subhashini Naikar
Vice Principal (SFC)



Prof. (Dr.) Digambar Ganjewar
Principal

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