

PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING LESSON PLAN

BRANCH : Electrical Engineering	SEMESTER : 3rd	NAME OF THE TEACHING FACULTY : MR. BALARAM DAS
SUBJECT: Programming for Problem Solving - Lab Manual	NO. OF DAYS PER WEEK CLASS ALLOTTED : 02	SEMESTER FROM DATE: 14.07.2025 TO 15.11.2025
WEEK	CLASS DAY	LAB EXPERIMENTS
1 ST	1 st	Unit I: C Programming 1. Introduction to C Programming • History and Importance of C
	2 nd	2. Constants, Variables, and Data Types
2 ND	1 st	3. Managing Input and Output Operations
	2 nd	4. Operators and Expressions
3 RD	1 st	5. Decision Making and Branching
	2 nd	6. Decision Making and Looping
4 TH	1 st	7. Arrays
	2 nd	1. Display college name 20 times using loop.
5 TH	1 st	2. Add and display all even numbers from 1 to 100.
	2 nd	3. Find the smallest/largest element in an array.
6 TH	1 st	4. Sort array elements in ascending/descending order.
	2 nd	5. Input and display a 3x3 matrix.
7 TH	1 st	6. Perform addition and subtraction of two 2D matrices.
	2 nd	7. Multiply two 2D matrices.
8 TH	1 st	8. Demonstrate string functions: strlen(), strcpy(), strcat(), strcmp().
	2 nd	9. Calculate area of a circle using functions.
9 TH	1 st	10. Calculate factorial using recursion.
	2 nd	11. Demonstrate: Call by value, Call by reference, Pointer arithmetic.
10 TH	1 st	record writing and checking
	2 nd	Unit II: Introduction to MATLAB Programming 1. Basics of MATLAB Programming
11 TH	1 st	2. Vectors and Matrices
	2 nd	3. Control Flow and Functions
12 TH	1 st	4. Plotting and Visualization
	2 nd	5. Introduction to Simulink
....	1 st	record writing and checking

13th	2nd	1. Perform basic matrix operations and array manipulations.
14th	1st	2. Find Eigenvalues and Eigenvectors of a matrix.
	2nd	3. Write a MATLAB script to plot mathematical functions.
15th	1st	4. Implement a Simulink model for a simple system.
	2nd	record writing and checking

SIGNATURE OF H.O.D

Balaram Das

SIGNATURE OF LECTURER