

**PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI**

**DEPARTMENT OF COMPUTER SCIENCE ENGINEERING LESSON PLAN**

<b>BRANCH :</b> CSE	<b>SEMESTER :</b> 3RD	<b>NAME OF THE TEACHING FACULTY :</b> <b>MRS.Jayashree Bishoi</b>
<b>SUBJECT :</b> DATA STRUCTURE	<b>NO. OF DAYS PER WEEK CLASS ALLOTTED : 04</b>	<b>SEMESTER FROM DATE: 14.07.2025 TO 15.11.2025</b>
<b>WEEK</b>	<b>CLASS DAY</b>	<b>THEORY TOPICS</b>
<b>1st</b>	<sup>1</sup> st	<b>Introduction to C-Programming</b>
	<sup>2</sup> nd	Basic Terminologies(Software,Computer Languages)
	<sup>3</sup> rd	Character set,'C' tokens, Keywords,Identifiers,Constants,Variables
	<sup>4</sup> th	Data Types,Declaration of Variables
<b>2nd</b>	<sup>1</sup> st	Operators ad its types
	<sup>2</sup> nd	Decision making and branching
	<sup>3</sup> rd	if statement, if----else, nested if, switch case
	<sup>4</sup> th	Decision making and looping
<b>3rd</b>	<sup>1</sup> st	for loop,while loop,do-----while loop
	<sup>2</sup> nd	Errors and Type of Errors
	<sup>3</sup> rd	Function(Definition,declaration,call)
	<sup>4</sup> th	Question Answer Discousion
<b>4th</b>	<sup>1</sup> st	<b>1. Introduction to Data Structures</b>
	<sup>2</sup> nd	Basic Terminology
	<sup>3</sup> rd	Classification of Data Structure
	<sup>4</sup> th	Operations on Data Structure
<b>5th</b>	<sup>1</sup> st	Asymptotic analysis of algorithms
	<sup>2</sup> nd	Worst-case analysis of algorithms.
	<sup>3</sup> rd	Question Answer Discousion
	<sup>4</sup> th	<b>2. Linear Data Structures(Introduction)</b>
<b>6th</b>	<sup>1</sup> st	Stacks-Introduction to Stacks
	<sup>2</sup> nd	Array Representation of Stacks
	<sup>3</sup> rd	Operations on a Stack
	<sup>4</sup> th	Applications of Stacks
<b>7th</b>	<sup>1</sup> st	Infix-to-Postfix Transformation
	<sup>2</sup> nd	Evaluating Postfix Expressions
	<sup>3</sup> rd	Queues: Introduction to Queues
	<sup>4</sup> th	Array Representation of Queues

8th	1st	Operations on a Queue
	2nd	Types of Queues-DeQueue
	3rd	Circular Queue
	4th	Applications of Queues
9th	1st	Round Robin Algorithm
	2nd	<b>3.Linked Lists(Introduction)</b>
	3rd	Singly Linked List
	4th	Representation in Memory
10th	1st	Operations on a Single Linked List
	2nd	Circular Linked Lists
	3rd	Doubly Linked Lists
	4th	Linked List Representation
11th	1st	Operations of Stack
	2nd	Linked List Representation
	3rd	Operations of Queue
	4th	Exam related question answer discouision
12th	1st	<b>4.Non-Linear Data Structures(Introduction)</b>
	2nd	Trees-Basic Terminologies
	3rd	Definition and Concepts of Binary Trees
	4th	Representations of a Binary Tree using Arrays
13th	1st	Representations of a Binary Tree using Linked Lists
	2nd	Operations on a Binary Tree-Insertion
	3rd	Operations on a Binary Tree-Deletion
	4th	Operations on a Binary Tree-Traversals
14th	1st	Types of Binary Trees
	2nd	Question Answer Discouision
	3rd	<b>GRAPHS:(Introduction)</b>
	4th	Graph Terminologies
15th	1st	Representation of Graphs- Set
	2nd	Representation of Graphs- Linked
	3rd	Representation of Graphs- Matrix
	4th	Graph Traversals

Biswaranjan Sain

SIGNATURE OF H.O.D

Jayashree Bishoi

SIGNATURE OF LECTURER