LESSON PLAN

SUB: DATA STRUCTURES & ALGORITHMS LAB
BRANCH:- COMPUTER SCIENCE& ENGG.
SEMESTER:3rd
NAME OF FACULTY: ABHISHEK PADHI (GF in CSE)

GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2025-26

Hod ,CSE

Academic Co-ordinator

Academic Co-ordinator

Principal
Govt. Polytechnic, Bhadrak

DEPARTMENT OF Computer Science & Engg,,

Discipline: Computer Science & Engineering	**Semester:** 3rd Winter/2025	**Name of the faculty:** ABHISHEK PADHI **Email Id:** abhishekpadhi24@gmail.com
Subject: Data Structure & Algorithms Lab (Pr-3)	**No. of Days/week:** 04	**StartDate:** 14/07//2025 **EndDate:** 15/11/2025

Week	Class Day	Practical Topics
1st	1st	Write a program to analyze & compare the time complexity of basic operations on arrays & linked lists
	2nd	Implementation of Stack operation using arrays & linked lists
2nd	1st	Implementation of Stack operation using arrays & linked lists, Develop programs for application of stack
	2nd	Develop programs for application of stack
3rd	1st	Implement queue operations using arrays & linked lists
	2nd	Implement queue operations using arrays & linked lists, Write a program for types of queues
4th	1st	Write a program for types of queues
	2nd	Implement of singly linked list operations
5th	1st	Write a program to create & manipulate circular & doubly linked lists
	2nd	Write a program to create & manipulate circular & doubly linked lists
6th	1st	Implement queue & stack operations using linked lists
	2nd	Implement queue & stack operations using linked lists
7th	1st	Implementation of Binary tree operation
	2nd	Implementation of Binary tree operation
8th	1st	Develop programs for types of binary trees
	2nd	Develop programs for types of binary trees
9th	1st	Implementation of graph representation
	2nd	Implementation of graph representation
10th	1st	Basic graph traversals
	2nd	Basic graph traversals
11th	1st	bubble sort
	2nd	selection sort

12th	1st	Insertion sort
	2nd	Merge sort
13th	1st	quick sort
	2nd	Write a programs for searching using binary search trees and hash tables
14th	1st	Write a programs for searching using binary search trees and hash tables
	2nd	Implementation of symbol table operation using balanced search trees
15th	1st	Implementation of symbol table operation using balanced search trees
	2nd	Revision

Abhishek Padhe

Signature of faculty