LESSON PLAN

SUB: OPERATING SYSTEM
BRANCH:- COMPUTER SCIENCE& ENGG.
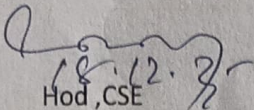SEMESTER:4th
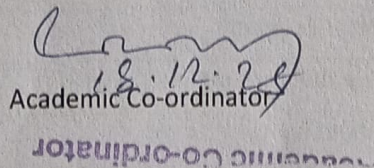NAME OF FACULTY: ABHISHEK PADHI (GF in CSE)
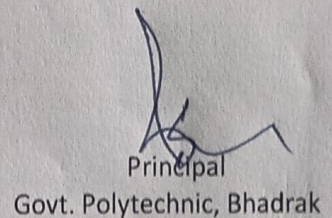
GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2025-26

Hod ,CSE

Academic Co-ordinator

Principal
Govt. Polytechnic, Bhadrak

DEPARTMENT OF Computer Science & Engg,,

Discipline: Computer Science & Engineering	Semester: 4th, Summer/2025	Name of the Faculty: ABHISHEK PADHI Email ID: abhishekpadhi24@gmail.com
Subject: Operating System (Th-1)	No. of Days/week: 03	StartDate:22.12.2025 EndDate:18.04.2026

Week	Class Day	Theory Topics
1st	1st	Introduction, Objectives and functions of operating system.
	2nd	Basic concepts
	3rd	UNIX/LINUX architecture
2nd	1st	Kernel & system calls
	2nd	System programs
	3rd	services
3rd	1st	Process concept
	2nd	process control
	3rd	Operation on process
4th	1st	IPC
	2nd	Process scheduling
	3rd	Multi-thread programming
5th	1st	IPC
	2nd	Paging, Memory allocation
	3rd	Segmentation, Swapping
	1st	Demand paging
	2nd	Page fault handling
6th	3rd	Various faults
7th	1st	Virtual Memory
	2nd	Concept of a file
	3rd	Access methods

8th	1st	Directory structure
	2nd	File protection
	3rd	Sharing of files
9th	1st	file systems, reliability
	2nd	Free space management
	3rd	Efficiency & performance
10th	1st	Different types of file systems
	2nd	Sharing of files
	3rd	Mass storage structure
11th	1st	Mass storage structure-overview
	2nd	Disk structure
	3rd	Disk attachment
12th	1st	Disk scheduling algorithms, Swap space management
	2nd	RAID types-RAID-0, RAID-1, RAID 5
	3rd	Concept of deadlock
13th	1st	Resources
	2nd	Deadlock prevention: Banker Algorithm & safety Algorithm
	3rd	The ostrich Algorithm

14th	1st	Deadlock Detection & Recovery
	2nd	Deadlock prevention
	3rd	Authentication, Access control
15th	1st	Access rights, System logs
	2nd	Previous year Question Discussion
	3rd	Previous year Question Discussion

Abhishek Padhi

12.24

Signature of faculty