

# C. V. Raman Polytechnic, Bhubaneswar

## Lesson Plan

Discipline:	Computer Science & Engineering	Semester:	4th
Subject:	Operating System	Name of the Teaching Faculty:	Kshyamasagr Mahnata
No. of Days/per week class allotted:	3	Semester From date:	22/12/2025
No. of Weeks:	15	To Date:	18/04/2026

Week	Class Day	Theory/Practical Topics
1st	1st	<b>Overview of operating System:</b> Basic concepts
	2nd	UNIX/LINUX architecture
	3rd	Kernel
2nd	1st	Services
	2nd	System calls
	3rd	System programs
3rd	1st	<b>Process Management:</b> Process concepts
	2nd	Operations on process
	3rd	IPC
4th	1st	Process scheduling
	2nd	Process scheduling
	3rd	Process scheduling
5th	1st	Multi threaded programming
	2nd	<b>Memory Management:</b> Memory allocation
	3rd	Swapping
6th	1st	Paging
	2nd	Segmentation
	3rd	Virtual memory
7th	1st	Various faults
	2nd	<b>File Management:</b> Concepts of file
	3rd	Access methods
8th	1st	Directory structure
	2nd	File system mounting
	3rd	File sharing and protection
9th	1st	File system structure and implementation

10th	2nd	Directory implementation
	3rd	Free space management
	1st	Efficiency and performance
11th	2nd	Different type of file systems
	3rd	<b>I/O Systems:</b> Mass storage structure-overview
	1st	Disk structure
12th	2nd	Disk attachment
	3rd	Disk Scheduling Algorithms
	1st	Swap space management
13th	2nd	RAID types-RAID 0 RAID 1 RAID 5
	3rd	<b>Dead Locks:</b> Concept of deadlock
	1st	resources
14th	2nd	Deadlock prevention: Bankers algorithm & safety Algorithm
	3rd	The Ostrich Algorithm
	1st	Deadlock detection and Recovery
15th	2nd	Deadlock prevention
	3rd	<b>OS Security:</b> Authentication
	1st	Access Control
15th	2nd	Access rights
	3rd	System logs



Signature of Faculty



Signature of H.O.D.