

LESSON PLAN (2024-25)

OPERATING SYSTEM WITH LINUX

SEMESTER III

(COMPUTER SCIENCE ENGINEERING)

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FACULTY: TRINA BANERJEE DWIVEDI

LECTURER (COMPUTER SCIENCE)

Operating System - Semester III Lesson Plan (64 Lectures)

UNIT I: Introduction to OS & Process Management

S.No.	Topic	Planned no. of lectures
1	Introduction & Objectives	1
2	Functions & Services	1
3	Types of OS	1
4	Structure of OS	1
5	System Calls	1
6	Process Concept	1
7	PCB	1
8	Operations on Processes	1
9	Threads	1
10	CPU Scheduling Intro	1
11	Scheduling Criteria	1
12	FCFS	1
13	SJF & Priority	1
14	Round Robin	1

Total = 14

UNIT II: Deadlock & Scheduling

S.No.	Topic	Planned no. of lectures
1	Real-time Scheduling	1
2	Deadlock Definition	1
3	Resource Allocation Graph	1
4	Prevention	1
5	Avoidance	1
6	Detection	1
7	Recovery	1
8	Algorithm Comparison	1
9	Numerical Practice	1
10	Unit Test I	1

Total = 10

UNIT III: Memory Management

M. Ramesh

S.No.	Topic	Planned no. of lectures
1	Need for Memory Management	1
2	Contiguous Allocation	1
3	Partitioning	1
4	Swapping	1
5	Non-contiguous Allocation	1
6	Paging	1
7	Page Table	1
8	Segmentation	1
9	Virtual Memory	1
10	Demand Paging	1
11	FIFO Replacement	1
12	LRU & Optimal	1
13	Thrashing	1
14	Practice	1

Total = 14

UNIT IV: File & Disk Management

S.No.	Topic	Planned no. of lectures
1	File Concept	1
2	Attributes & Operations	1
3	File System Structure	1
4	Directory Structure	1
5	Disk Structure	1
6	FCFS Disk Scheduling	1
7	SSTF	1
8	SCAN & C-SCAN	1
9	Disk Space Management	1
10	Security	1
11	Protection	1
12	Linux File System	1
13	Mounting	1
14	Unit Test II	1

Total = 14

UNIT V: Linux OS

S.No.	Topic	Planned no. of lectures
1	Introduction	1

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S.No.	Topic	Planned no. of lectures
2	Installation	1
3	Hierarchy	1
4	Commands	1
5	Process Management	1
6	User & Group	1
7	Shell & Admin	1
8	Case Study	1

Total = 08

Revision

S.No.	Topic	Planned no. of lectures
1	Revision I & II	1
2	Revision III	1
3	Revision IV	1
4	Final Revision	1

Total = 04

Grand total lectures = 64

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