LESSON PLAN

Department: CSE		Semester: 4th , Name of Faculty : SMT. KUMARI JYOTI	
Subject: Operating System (OS)	**No. of days/ week Class allotted: 4**	**Effective From Date: 04.02.2025**	
		No. of Week- 15	
		Topic to be Covered:	
Week	**Class Day**	**Theory**	
1st	1st	**UNIT 1: INTRODUCTION**	
	2nd	**1.1** Objectives and Explain functions of operating system.	
	3rd	**1.2** Evolution of Operating system	
	4th	**1.3** Structure of operating system.	
2nd	1st	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**	
	2nd	**UNIT 2: PROCESS MANAGEMENT**	
	3rd	**2.1** Process concept • process control • interacting processes • inter process messages.	
	4th	**2.2** Implementation issues of Processes.	
3rd	1st	**2.3** Process scheduling, job scheduling.	
	2nd	**2.4** Process synchronization, semaphore.	
	3rd	**2.5** Principle of concurrency, types of scheduling.	
	4th	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**	
4th	1st	**UNIT 3: MEMORY MANAGEMENT**	
	2nd	**3.1** Memory allocation Techniques	
	3rd	**3.1.1** Contiguous memory allocation	
	4th	**3.1.2** non-contiguous memory allocation	
5th	1st	**3.2** Swapping	
	2nd	**3.3** Paging	
	3rd	**3.1.1** Segmentation	
	4th	**3.1.2** Virtual memory using paging,	
6th	1st	**3.4** Demand paging, page fault handling.	
	2nd	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**	
	3rd	**UNIT 4: DEVICE MANAGEMENT**	
	4th	**4.1** Techniques for Device Management	
7th	1st	**4.1.1** Dedicated	
	2nd	**4.1.2** shared and	
	3rd	**4.1.3** Virtual	
	4th	**4.2** Device allocation considerations	

8th	**1st**	**4.2.2** I/O traffic control
	2nd	**4.2.3** I/O Schedule
	3rd	**4.2.3** I/O Device handlers.
	4th	**4.3** SPOOLING.
9th	**1st**	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**
	2nd	**UNIT 5: DEAD LOCKS**
	3rd	**5.1** Concept of deadlock.
	4th	**5.2** System Model
10th	**1st**	**5.3** Dead Lock Detection
	2nd	**5.4** Resources allocation Graph
	3rd	**5.5** Methods of Deadlock handling
	4th	**5.6** Recovery &Prevention
11th	**1st**	**5.6.1** Explain Bankers Algorithm & Safety Algorithm
	2nd	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**
	3rd	**UNIT 6: FILE MANAGEMENT**
	4th	**6.1** File organization
12th	**1st**	**6.1.1** Directory & file structure
	2nd	**6.1.2** sharing of files
	3rd	**6.2** File access methods, file systems, reliability
	4th	**6.3** Allocation of disk space
13th	**1st**	**6.4** File protection, secondary storage management.
	2nd	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**
	3rd	**UNIT 7: SYSTEM PROGRAMMING**
	4th	**7.1** Concept of system programming and show difference from Application Complier
14th	**1st**	**7.2** Compiler, functions of compiler.
	2nd	**7.3** Compare compiler and interpreter.
	3rd	**7.4** Seven phases of compiler, brief description of each phase
	4th	**1. Doubt Clearing class** **2. Quiz test** **3. Assignment**
15th	**1st**	**Revision**
	2nd	**Revision**
	3rd	**Previous Year Question Discussions**
	4th	**Previous Year Question Discussions**

Signature of Faculty

HOD,
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