PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of Electronics & Communication Engineering

LESSON PLAN

Subject Name: - Operating System **Subject Code: - ECO-11A**
Year: - 4th **Semester: - 7th**

Lecture No	Unit No	Topic	COs Covered
L 1	UNIT-I	Introduction to OS , Goals of OS	CO1
L 2		Types of OS	
L 3		Types of OS	
L 4		Real time and general-purpose OS	
L 5		Pipelining ; Booting of computer	
L 6		Services provided by OS	
L 7		Structure of OS	
L 8		OS Functions - Resource Manager	
L 9		OS Security and Protection	
		Upgrading an OS	
L 10	UNIT-II	Interaction with OS in Mainframe systems	CO2
L 11		IBM 360 mainframe logic diagram	
L 12		Channel concept in IBM System/360	
L 15		PSW concept in IBM System/360	CO3
L16		Fields of PSW	
L17		OS and interrupt	
L 18		Controlling I/O through channels	
L 19		Interrupt cycle	
L 20		Fundamental concept of IPC	
L 21	UNIT-III	Introduction to concurrent processing	CO3
L 22		Process , Process state , PCB	
L 23		Process state transition	
L 24		Critical section	
L 25		Synchronization / Critical section problem	
L 26		Context switching	
L 27		Hierarchy of processes	
L 28		Process vs Threads	
L 29		Exec () system call	
L 30	UNIT-IV	Introduction to process scheduling	CO4
L 31		Allocation of different resources	
L 32		Scheduling queue	
L 33			

L 34		Scheduling algorithms	
L 35		Scheduling algorithms	
L 36		Introduction to deadlock	
L37		Deadlock and starvation	
L38		Resource allocation graphs	
L39		Ways to resolve deadlock	

Text Books:

1. Operating Systems , PP Choudhary by PHI Learning Pvt Ltd.

References:

1. Operating Systems : Internals and Design Principles, William Stallings, Prentice Hall , 7th Ed
2. Operating System Concepts", Abraham Silberschatz, Peter Baer Galvin, and Greg Gagne, Wiley, 9th ed.
3. Operating Systems : a concept based approach , Dhananjay M Dhamdhere , McGraw Hill 1st ed

Web resources:

1. https://www.geeksforgeeks.org/operating-systems/
2. https://www.javatpoint.com/operating-system