## LESSON PLAN

Name of the Institute:	C. V. Raman Polytechnic
Department:	Computer Science & Engineering
Semester/Division/Branch:	4 <sup>th</sup> Semester
Subject Name with code:	OPERATING SYSTEM (TH-1)
Total No. of Class (Required):	60
Faculty Name:	KSHYAMASAGAR MAHANTA

Class No.	Brief description of the Topic/Chapter to be taught	Remarks
1	INTRODUCTION.	
	Objectives and Explain functions of operating system	
2	Evolution of Operating system	
3	Structure of operating system.	
4	PROCESS MANAGEMENT	
	Process concept, process control, interacting processes	
5		
	inter process messages , Implementation issues of Processes	
6		
	Process scheduling, job scheduling	
7	Process scheduling, job scheduling	
8	Process scheduling, job scheduling	
9	Process scheduling, job scheduling	
10		
	Process synchronization, semaphore	
11	Principle of concurrency, types of scheduling	
12	Principle of concurrency, types of scheduling	
13	Principle of concurrency, types of scheduling	
14	MEMORY MANAGEMENT  Memory Management	
15	Memory allocation Techniques	
15	Contiguous memory allocation	
16	non contiguous memory allocation	

17	a ranging
10	Swapping
18	Paging
19	Paging
20	Segmentation
	Segmentation
21	Segmentation
22	virtual memory using paging,
23	Demand paging, page fault handling.
25	THE REAL PROPERTY.
24	DEVICE MANAGEMENT
100%	Techniques for Device Management
25	Dedicated, shared and virtual.
	Dedicated, Shared and Wittual.
26	
	Device allocation considerations
27	I/O traffic control
	I/O Schedule, I/O Device handlers
28	I/O Schedule, I/O Device handlers
29	
30	SPOOLING Test
50	
31	Revision
32	DEAD LOCKS
22	
33	Concept of deadlock
34	
35	System Model
33	Dead Lock Detection
36	Dead Lock Detection
37	
	Resources allocation Graph
20	Resources allocation Graph
38	Nesources allocalis
39	wack handling
40	Methods of Deadlock handling
40	Methods of Deadlock handling
41	Methods of Deadlock handling
	Methods of Deadlos

42	Recovery & Prevention,	
43	Recovery &Prevention,	
44	Bankers Algorithm	
45	Bankers Algorithm	
46	Safety Algorithm	
47	FILE MANAGEMENT  File organization	
48	Directory & file structure	
49	Directory & file structure	
50	sharing of files	
51	File access methods	
52	File access methods	
53	file systems, reliability	
54	Allocation of disk space	
55	Allocation of disk space	
56	File protection, secondary storage management	
57	SYSTEM PROGRAMMING Concept of system programming and show difference from Application Complier	
58	Compiler, functions of compiler	
59	Compare compiler and interpreter	
60	Seven phases of compiler, brief description of each phase	

Signature of the Faculty

Signature of the H.O.D