


CMR INSTITUTE OF TECHNOLOGY		USN <input type="text"/>							
Internal Assessment Test – III									
Sub:	Operating Systems						Code:	17MCA24	
Date:	06.06.2018	Duration:	90 mins	Max Marks:	50	Sem:	II	Branch:	MCA
Answer Any One FULL Question from each part.									
								Marks	OBE CO RBT
Part – I									
1 (a)	Explain process management and various process schedule algorithm in Linux operating system						10	CO5	L2
2 (a)	Describe hardware solution for critical section problem						5	CO3	L2
(b)	Explain fragmentation and its types with neat diagram						5	CO3	L1
Part – II									
3 (a)	What is Critical Section and Mutual Exclusion						5	CO3	L1
(b)	What is symmetric multiprocessor system? What are its benefits?						5	CO3	L1
4 (a)	What is system call? What are the types of system call? Give examples of each.						6	CO1	L2
(b)	Define PCB? List its contents						4	CO2	L1
PART - III									
5 (a)	Explain Banker's algorithm for deadlock avoidance						7	CO3	L3
(b)	Write short note about Inter process communication in Linux						3	CO5	L2
6 (a)	With a neat diagram explain the steps in handling page fault.						5	CO3	L3
(b)	Explain the components of Linux OS						5	CO5	L1
Part – IV									
7	Mention the different page table structure explain in brief						10	CO3	L2
8 (a)	Define Security problem and system threat						5	CO5	L2
(b)	Explain the role of operating system to prevent.						5	CO5	L1
Part – V									
9	Explain the following with respect to the file system: i) Contiguous allocation ii) Linked allocation iii) Indexed allocation						10	CO4	L1
10.	Describe the methods used for implementing directories structures						10	CO4	L2