

CONTINUOUS INTERNAL EVALUATION- 3

Dept:CSE	Sem / Div:4/ A & B	Sub: Operating Systems	S Code:18CS43
Date:5/08/2021	Time: 9:30-11:00 AM	Max Marks: 50	Elective:N
Note: Answer any 2 full questions, choosing one full question from each part.			

Q N	Questions	Marks	RBT	COs
PART A				
1 a	Consider the following page reference string 4 , 7, 6, 1, 7, 6, 1, 2, 7, 2 Assuming there are 3 memory frames, how many page faults would occur in the case of i) LRU ii) Optimal Algorithm iii)FIFO Note that initially all frames are empty.	9	L3	CO4
b	Explain page replacement with a neat diagram.	8	L2	CO4
c	What is page fault? Under what circumstances do page faults occur? Describe the actions taken by the operating system when a page fault occurs.	8	L2	CO4
OR				
2 a	Consider the following page reference string 3, 8, 2, 3, 9, 1, 6, 3, 8, 9, 3, 6, 2, 1, 3 Assuming there are 5 memory frames, how many page faults would occur in the case of i) LRU ii)FIFO Note that initially all frames are empty.	9	L3	CO4
b	Explain demand paging with example.	8	L2	CO4
c	Explain briefly different file types and different file access methods.	8	L2	CO4
PART B				
3 a	Given the following queue 95, 180, 34, 119, 11, 123, 62, 64 with head initially at track 50 and ending at track 199. Calculate the number of moves using FCFS, SSTF, Elevator and C look	9	L3	CO5
b	Explain the various components of Linux System	8	L2	CO5
c	How is IPC handled in Linux? Explain with suitable example	8	L2	CO5
OR				
4 a	What is disk scheduling? Discuss different disk scheduling techniques	9	L2	CO5
b	4 Explain Access Matrix method of system protection.	8	L2	CO5
c	Write a brief note on the design principles of Linux.	8	L2	CO5