Vivekananda College of Engineering & Technology, Puttur

[A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®]

Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08	Rev 1.10	CSE	26/08/2022

CONTINUOUS INTERNAL EVALUATION – 3

Dept:CSE	Sem / Div:4th CSE	Sub:Operating Systems	SCode:18CS43
Date:01/9/22	Time: 9:30-11:00	Max Marks: 50	Elective:N

Note: Answer any 2 full questions, choosing one full question from each part.

QN	Questions	Marks	RBT	CO's
	PART A			
1 a	What is a file? Explain the types, attributes and operations of the file.	10	L2	CO4
b	Consider the following page reference string 1, 2, 3, 5, 2, 3, 5, 7, 2, 1, 2, 3, 8, 6, 4, 3, 2, 2, 3, 6. Assuming there are 3 memory frames, how many page faults would occur in the case of i) LRU ii) Optimal Algorithm. Note that initially all frames are empty.	10	L2	CO4
c	Explain the different file access methods.	5	L2	CO4
	OR			
2 a	Explain the different types of directory structures, with examples and mention their advantages and disadvantages.	10	L2	CO4
b	For the following page reference calculate the faults that occur using FIFO and LRU for 3 and 4 page frames respectively 5, 4, 3, 2, 1, 4, 3, 5, 4, 3, 2, 1, 5. Compare the number of faults for both 3 and 4 page frames.	10	L2	CO4
c	What is Thrashing? How it can be controlled.	5	L2	CO4

PART B

3	a	Explain various types of disk attachment with neat diagrams.	10	L2	CO5
	b	Explain the different operations performed on the access rights, by taking any access matrix as an example.	10	L3	CO5
	c	With diagram explain components of Linux system.	5	L3	CO5
		OR			
4	a	Explain different types of disk scheduling algorithms by taking below example Queue-95,180,34,119,11,123,62,64 with initial head position at track 50 and ending at track 199.	10	L2	CO5
	b	Explain different implementation methods of access matrix and compare among them.	10	L3	CO5
	c	Write a short note on process scheduling.	5	L3	CO5

Prepared by: Mrs. Bharathi K/Mrs.Priyanka M Yalagach

HOD