R19

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
MCA I Year II Semester Regular Examinations October-2020
OPERATING SYSTEMS

Time: 3 hours   Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	**a** Discuss the services provided by operating system.	**6M**
	b Explain the process control type of system call.	**6M**

OR

2	What are the challenges in design and implementation of operating systems?	**12M**

UNIT-II

3	**a** Explain the critical section problem.	**6M**
	b Explain FCFS and SJF scheduling algorithm.	**6M**

OR

4	What is preemptive scheduling and scheduling criteria? Explain.	**12M**

UNIT-III

5	Write a brief description on Logical & Physical Address Space and Contiguous Allocation.	**12M**

OR

6	**a** What are the causes for trashing? Explain.	**6M**
	b Discuss first in first out page replacement algorithm.	**6M**

UNIT-IV

7	How a file is shared among multiple users? Explain.	**12M**

OR

8	Explain various directory structures.	**12M**

UNIT-V

9	Define Deadlock. What are the conditions that result in the creation of deadlocks?	**12M**

OR

10	Discuss the goals of protection and principles of protection in detail.	**12M**

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