O.P.Code:18CS0510 | R18 | H.T.No.

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech II Year II Semester Supplementary Examinations May/June-2024
OPERATING SYSTEMS
(Computer Science and Engineering)

Time: 3 Hours **Max. Marks: 60**

PART-A
(Answer all the Questions **5 x 2 = 10** Marks)

1	a	What is an Operating system?	CO1	L1	2M
	b	Define process.	CO2	L1	2M
	c	Give the condition necessary for a deadlock situation to arise.	CO3	L2	2M
	d	Define Page Fault.	CO4	L1	2M
	e	What are the various operations performed in a File?	CO5	L2	2M

PART-B
(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

2		Define Operating System and explain the various types of Operating Systems.	CO1	L1, L2	10M

OR

3	a	Explain briefly system calls with examples.	CO1	L2	5M
	b	Explain different operations performed by the operating system.	CO1	L2	5M

UNIT-II

4	a	Define Process? Explain process State diagram.	CO2	L1	5M
	b	Explain about process schedulers.	CO2	L2	5M

OR

5		Evaluate SJF CPU Scheduling algorithm for given Problem	CO2	L5	5M

Process	P1	P2	P3	P4
Process Time	8	4	9	5
Arrival Time	0	1	2	3

UNIT-III

6		What is critical section problem? Explain with example?	CO3	L1, L2	10M

OR

7	a	Explain about Deadlock Avoidance	CO3	L5	6M
	b	Explain how recovery from deadlock	CO3	L2	4M

UNIT-IV

8		Discuss about page replacement algorithms with example	CO4	L6	10M

OR

9	a	What is virtual memory? Discuss the benefits of virtual memory techniques	CO4	L1, L5	6M
	b	Write a short notes on Disk management	CO4	L5	4M

UNIT-V

10	a	Explain the concept of file with Example	CO5	L2	5M
	b	Explain about access method with Example	CO5	L2	5M

OR

11		Explain file allocation methods in detail.	CO5	L2	10M

***** END *****