R18

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
MCA I Year II Semester Supplementary Examinations October 2020
Operating systems
(MCA)

Time: 3 hours   Max. Marks: 60

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

UNIT-I

1	**a**	What are the objectives and functions of operating systems?	**6M**
	b	Explain different services provided by operating systems.	**6M**

OR

2	**a**	What are the challenges in design and implementation of operating systems?	**6M**
	b	What are the system programs and Explain?	**6M**

UNIT-II

3	**a**	What is thread? Discuss about thread scheduling	**6M**
	b	What is mean by process synchronization? Discuss about classic problems.	**6M**

OR

4	**a**	Explain preemptive and non-preemptive scheduling in detail.	**6M**
	b	Describe multiple processor scheduling, real-time scheduling.	**6M**

UNIT-III

5	**a**	Explain about the structure of the page table	**6M**
	b	Write brief note on i) First fit ii) Best fit iii) Worst fit	**6M**

OR

6	**a**	Explain segmentation technique in brief.	**4M**
	b	Discuss demand paging in detail	**8M**

UNIT-IV

7	**a**	Discuss about mass storage structure and disk structure in detail	**8M**
	b	Explain about RAID structure in detail.	**4M**

OR

8	**a**	Briefly discuss about file sharing	**6M**
	b	Discuss on directory implementation	**6M**

UNIT-V

9	**a**	Explain deadlock prevention method.	**6M**
	b	Discuss about domain protection	**6M**

OR

10	**a**	What are the necessary conditions of deadlock? Explain in detail	**6M**
	b	Discuss language based protection.	**6M**

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