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Reg. No: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
M.Tech I Year II Semester Regular Examinations October-2020
REAL TIME OPERATING SYSTEMS
(VLSI)

Time: 3 hours   Max. Marks: 60

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

UNIT-I

1	**a**	Explain the overview of Threads and Tasks.	**6M**
	b	Draw the structure of Micro kernel and explain in brief.	**6M**

OR

2	Discuss how kernel plays an important role in the Operating systems.	**12M**

UNIT-II

3	**a**	Explain the Process control phenomenon based on different UNIX commands.	**8M**
	b	What is meant by semaphore? Mention few advantages of shared memory.	**4M**

OR

4	Write a short note about FIFOs with any related example.	**12M**

UNIT-III

5	**a**	What are different temporal parameters of real time systems during workload?	**6M**
	b	With a neat sketch, explain periodic task model of real time systems.	**6M**

OR

6	**a**	Write about the Periodic task model.	**6M**
	b	Discuss about task and task states in Real time operating systems.	**6M**

UNIT-IV

7	**a**	How effective release times and deadlines are useful in real time scheduling?	**6M**
	b	Write a short note on Clock driven, weighted round robin and priority driven.	**6M**

OR

8	**a**	Define task and explain with diagram all the five states of a task.	**4M**
	b	Briefly explain priority driven approach and weighted round robin approach.	**8M**

UNIT-V

9	**a**	For task Priority function define 3 options on spawning.	**4M**
	b	Describe memory related functions of MUCOS.	**8M**

OR

10	**a**	Write a note on integrated failure handling.	**5M**
	b	Explain in brief about that Memory management.	**7M**

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