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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**I Year M.Tech II Semester (R16) Regular Examinations May 2017****REAL TIME OPERATING SYSTEMS**

(Common to ES & VLSI)

(For Students admitted in 2016 only)

Time: **3 hours**Max. Marks: **60**(Answer all Five Units **5 X 12 = 60** Marks)**UNIT-I**

- Q.1** a. Explain the Communication and Synchronization issues. 8M
b. Name some of the Scheduling mechanisms 4M

OR

- Q.2** a. Define an Operating system 4M
b. Explain how kernel plays an important role in the Operating systems 8M

UNIT-II

- Q.3** a. What is meant by File sharing? Explain that with suitable example 8M
b. Write in brief about that Message Queues 4M

OR

- Q.4** a. Explain what is Shared memory concept 6M
b. Explain the Process control phenomenon based on different UNIX commands 6M

UNIT-III

- Q.5** a. What are different temporal parameters of real time systems during workload? 6M
b. explain the Resource parameters of job and parameters of resources 6M

OR

- Q.6** a. With a neat sketch, explain periodic task model of real time systems 6M
b. Explain in brief about Scheduling Hierarchy 6M

UNIT-IV

- Q.7** a. Explain Schedule mechanism of real time operating systems. 6M
b. Write short note on Precedence constraints and data dependency 6M

OR

- Q.8** a. Compare and Contrast the offline and online scheduling? 8M
b. Write the Salient features of Pre emptive Priority 4M

UNIT-V

- Q.9**
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| a. | Compare Process, Scheduling and Interrupt Managements in RT Linux | 6M |
| b. | Describe memory related functions of MUCOS | 6M |
- OR**

- Q.10**
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| a. | Write a note on integrated failure handling | 6M |
| b. | Explain in brief about that Memory management | 6M |

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