

Roll No

MEVD-202

M.E./M.Tech. II Semester

Examination, December 2016

Real Time Operating System

Time : Three Hours

Maximum Marks : 70

Note : Attempt any five questions. Each question carry equal marks.

1. a) Explain Inter process communication in operating system? 7
b) Explain internal and external Fragmentation in memory management with suitable example? 7
2. a) Define interrupt level and task level with diagram. 7
b) Define various scheduling methods in Real Time Operating System. 7
3. a) Define the following term clock driven and event driven with suitable example. 7
b) Define two types of priority based kernels. 7
4. Explain in detail Task scheduling and Task management. 14
5. a) Explain distributed system. Write the feature and advantage of distributed system. 7
b) Explain priority inversion problem with example. 7

6. a) What is meant by RTOS? What are the goals and performance metrics of RTOS? 7
b) What are the different types of semaphores in Vxworks RTOS? Which is the fastest? 7
7. Explain how a real time operating system differ from traditional operating system. Name a few real time operating system that are commercially available? Explain any one. 14
8. Write a short notes (any two) : 14
a) Fully preemptible kernel
b) Commercial embedded operating system
c) E.D.F.
