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Roll No .....

**MTDE/MEDI/MTEI - 204****M.E./M.Tech., II Semester**

Examination, December 2015

**Embedded System****Time : Three Hours****Maximum Marks : 70****Note :** i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain any four addressing modes supported by MCS-51. 8  
b) Explain about interrupts and their priority level. 6
2. a) Describe I/O port with respect to MCS-96 family. 6  
b) What is PWM in case of 96 family? Explain it with suitable block diagram. 8
3. a) Compare salient features of ARM7, ARM10 and ARM11. 8  
b) What are the different interrupts used in ARM processors? 6
4. a) Write short notes on : 8  
i) Cross compiler  
ii) Assembler  
b) Explain Round Robin and Round Robin with interrupt. 6
5. What do you understand by task and task states under an RTOS? Explain in detail with suitable example. 14

6. a) What is RTOS semaphores, describe. 6  
b) What are the ways to protect shared data with respect to RTOS? 8
7. a) Explain the Timer function in RTOS, with example. 6  
b) Explain the memory management with respect to RTOS. 8
8. a) Explain different types of memory mapping. 8  
b) Write short notes on : 6  
i) USART  
ii) AIC (Advanced Interrupt Controller)

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