

C 29719



Name.....

Reg. No.....

**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION  
OCTOBER 2012**

**EC 09 L-16—EMBEDDED SYSTEM**

(2009 admissions)

Time : Three Hours

Maximum : 70 Marks

**Part A**

*Answer all questions.*

1. Differentiate between microprocessor and microcontroller.
2. What is real time operating system ?
3. Name the architecture supported in ARM processor.
4. What is a cross compiler ?
5. What is meant by ISS ?

(5 × 2 = 10 marks)

**Part B**

*Answer any four questions.*

6. Explain the requirements of Embedded system.
7. Define task and task states.
8. What is the purpose of network operating system ?
9. What are the different modes of operation of 68 HCl2 ?
10. Design a driver circuit for an LED.
11. What parameters are involved in the interfacing of I/O devices to all Embedded system.

(4 × 5 = 20 marks)

**Part C**

*Answer all questions.*

12. Discuss the challenges and issues present in Embedded system development.  
*Or*
13. Describe any one application of Embedded system.
14. Explain about memory management and OS security.  
*Or*
15. Explain in detail about any two software development tools used in the development of RTOS.
16. Describe the architecture of PIC microcontroller.  
*Or*
17. Describe the architecture of ARM processor.
18. Explain how a stepper motor is controlled using a microcontroller.  
*Or*
19. Explain in detail about IDE.

(4 × 10 = 40 marks)