PVP 12

Code: EE7T4

IV B.Tech - I Semester – Regular / Supplementary Examinations
November 2016

EMBEDDED SYSTEMS
(ELECTRICAL & ELECTRONICS ENGINEERING)

Duration: 3 hours Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Explain the basic building blocks of an embedded system. 7 M

   b) What are the special considerations in designing an embedded system? 7 M

2. a) Explain the process of generating an executable image for embedded software. 7 M

   b) Differentiate Von Neumann and Harvard architecture. 7 M

3. a) Explain the interconnection between a microcontroller and a SRAM. 7 M

   b) List the important features of PC expansion slot interfaces to develop PC add-on cards. 7 M

4. a) Explain in detail the 9 pin connector configuration of RS232. 7 M

b) What is IrDA interface? What are its advantages and limitations? 7 M

5. a) Explain how a semaphore can be used for inter task synchronization. 6 M

b) Discuss briefly about various task scheduling algorithms. 8 M

6. a) Discuss briefly about the cross-platform development tools for microcontroller. 7 M

b) Write the program to glow the LED when the switch is pressed. 7 M

7. a) Write a program for communicating through the UART port. 7 M

b) Write a program to toggle the LEDs. 7 M

8. a) List the important features of Prayog. 7 M

b) Explain the theory of programming the flash memory using JTAG. 7 M