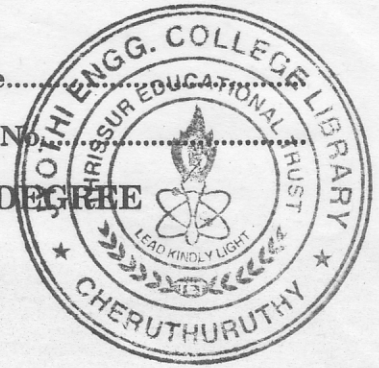C 5489

SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2010

AI/BM 04 705 (E)—EMBEDDED SYSTEMS

(2004 Admissions)

Time : Three Hours　　　　　　　　　　　　　　　　　　　　　　　　Maximum : 100 Marks

Answer **all** *questions.*

1. (a) Explain about soft and Hard real time systems.

   (b) List the software and Hardware tools used for the design of embedded systems.

   (c) Write a program using timer of 8051 to generate a delay of 500 ms.

   (d) Write a program to send two different strings to the serial port.

   (e) Explain about the registers and memory space of 80196.

   (f) Compare and contrast the teatness of PIC 16F84.

   (g) Bring about the merits and demerits of Round Robin architecture.

   (h) Explain about Task States.

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2. (a) Discuss about embedded processors.

   Or

   (b) Explain in detail about any two hardware tools used for embedded design.

3. (a) Explain about ADC/DAC interface of 8051 and keyboard interface to 8051.

   Or

   (b) Discuss briefly about stepper motor interface and interrupts of 8051.

4. (a) Describe in detail about PIC.

   Or

   (b) Explain about the addressing modes of PIC 16F84 and write a program to generate a PWM waveform.

5. (a) Describe in detail about Real time systems.

   Or

   (b) Explain about Queue scheduling and Embedded Linux features.

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