

**8E8026****8E8026**

**B.Tech. VIII Semester (Main) Examination, May 2016**  
**Electronics And Communication Engg.**  
**8EC4.3 Micro Controller and Embedded Systems**

**Time : 3 Hours****Maximum Marks : 80**  
**Min. Passing Marks : 24****Instructions to Candidates:**

*Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.)*

*Units of quantities used/calculated must be stated clearly*

**Unit - I**

1. Draw and explain the functional block diagram of 8051 micro controller (16)
- OR**
1. a) Explain the pin diagram of 8051 micro controller (10)
  - b) Explain the bit format of SCON and PCON registers of 8051 micro controller (6)

**Unit - II**

2. Explain the Jump and Call instructions of 8051 assembly language with examples (16)
- OR**
2. Explain the various addressing modes of 8051 micro controller (16)

**Unit - III**

3. Explain interrupt structure of 8051 in detail (16)
- OR**
3. Explain TMOD and TCON registers of 8051 micro controller (16)

**Unit - IV**

4. Compare serial I/O Interface and parallel I/O Interface with suitable example(16)

**OR**

4. Explain the interfacing of LCD display with 8051 micro controller (16)

**Unit - V**

5. What is scheduling? Explain Full Pre-emptive scheduling (16)

**OR**

5. a) What do you mean by real time operating system for system design? What is difference between Hard real time operating system and soft real time operating system (8)

- b) What do you mean by multi tasking system? Explain with suitable examples (8)

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