

6E3205

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B.Tech VI Sem. (Main/Back) Exam. April-May, 2012  
Computer Engg.  
6CS5 Embedded System Design

Time : 3 Hours

Maximum Marks : 80

Min. Passing Marks : 24

Instructions to Candidates:

Attempt any **five questions**, selecting one question from each unit. All Question 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 clerly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. \_\_\_\_\_ Nil \_\_\_\_\_ 2. \_\_\_\_\_ Nil \_\_\_\_\_

### Unit-I

1. (a) What is the difference between Microprocessor, Microcontroller and DSP? Explain. Write down the general capabilities of Microcontroller. 10
- (b) Explain the use of Microcontroller in Embedded systems. 6

Or

1. (a) What are the selection criterias of a Microcontroller? Explain. 8
- (b) Explain the architecture of 32 bit Microcontroller. 8

### Unit-II

2. (a) Explain the I/O Ports, Counters and Timers of a Microcontroller MSP 430. 10