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Roll No.....

**MEDC-102****M.E./M.Tech. I Semester**

Examination, December 2017

**Micro Controller System Design***Time : Three Hours**Maximum Marks : 70*

- Note:* i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) With the help of block diagram discuss the architecture of 16-bit microprocessor.  
b) Explain briefly about single chip microcomputers.
2. a) Differentiate between 8 bit microprocessor and 16 bit microprocessor.  
b) Explain the architectural design of 8051 microcontroller.
3. a) Discuss about the addressing modes of 8051 microcontroller.  
b) Explain about the interrupt handling in microcontroller.
4. a) Discuss the concept of memory mapping. Also explain how it is down.  
b) Discuss about integrated software development environment.

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5. a) Discuss about object oriented interfacing and programming.  
b) Explain about Recursion and Debugging.
6. a) Discuss the architecture of PIC microcontroller.  
b) Discuss the design and application of microcontroller in data acquisition.
7. Discuss about DSP processor architecture and sample design using TI-DSP.
8. Write short notes any two of the following:
  - a) 68HC11 architecture
  - b) Embedded controllers
  - c) Process control

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