

Total No. of Questions : 8 } [Total No. of Printed Pages : 2

Roll No

MEDC-102

M.E./M.Tech., I Semester

Examination, December 2016

Micro Controller System Design

Time : Three Hours

Maximum Marks : 70

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

1. a) Give a brief review of 8-bit and 16-bit microprocessor.
b) What are various interfacing techniques? Explain.
2. a) Give architecture of 8051 micro-controller.
b) Explain addressing modes of 8051.
3. a) Explain register structure of 8051.
b) Describe interrupts available in 8051.
4. a) Explain modular approach in software development.
b) Discuss recursion and debugging.
5. a) Explain application of micro-controller in data acquisition.
b) Describe embedded controllers.

[2]

6. a) Describe DSP processor architecture.
b) Discuss sample design using TI-DSP
7. a) Explain instruction set of 8051.
b) Discuss memory mapping in 8051.
8. Write short notes on any two of the following :
 - a) Program and data memory
 - b) Programming in 8051
 - c) Object oriented programming
 - d) Process control
 - e) Design using micro-controller in data acquisition
