

Roll No

MEDC-102

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

Examination, June 2016

Micro Controller System Design

Time : Three Hours

Maximum Marks : 70

- Note :** i) Attempt any five questions out of eight questions.
ii) All questions carry equal marks.
iii) Assume suitable data, if required.

1. a) Explain the concept of single chip micro computers.
b) Differentiate between the 8 bit and 16 bit micro processor.
2. a) With the help of suitable example, explain how I/O device are connected using memory mapped I/O and peripheral I/O in 8085.
b) Design a 8085 micro processor system to interface as $8\text{ K} \times 8\text{ EPROM}$ and $8\text{ K} \times 8\text{ RAM}$.
3. a) Explain the types of interrupts in 8085 system.
b) Explain the various machine cycles supported by 8085.
4. a) Explain the functions and operating modes and timer functions in 8085.
b) Draw and explain the pin diagram of 8751 Micro controller.

5. a) Explain the JUMP instruction present in 8051 micro controller with a numeric code and operation for each.
b) What do you mean by software development modular approach?
6. a) What are the applications of micro controllers in data acquisition techniques? Explain any one of them.
b) Highlight the register drawing pin diagram of 8 bit micro processor and explain them.
7. a) Explain the principle of integrated software development environment structure. On what basis these pillars stand in these technical sessions?
b) What do you mean by object oriented interfacing and programming? Explain using suitable example.
8. Write short notes (any four) :
 - a) Embedded controllers
 - b) Recursion
 - c) Motorola 68HC0
 - d) ATMEL 89C52
 - e) PIC micro controller
 - f) DSP processor architecture
