

Roll No

MEDC-102
M.E./M.Tech., I Semester
Examination, December 2013
Micro Controller System Design
Time : Three Hours

Maximum Marks : 70

- Note :** 1. *Attempt any five questions.*
2. *All questions carry equal marks.*

1. Draw and explain the internal architecture of any DSP Processor in detail. RGPVONLINE.COM
2. a) Explain the mode-2 operations in serial data communication of 8051 with an assembly language program.
b) Draw and explain the internal architecture of 8051 in detail.
3. Explain the interrupt structure, SFR and timers of 8051.
4. a) Explain the various addressing modes of 8051 with examples. RGPVONLINE.COM
b) Write an assembly language program in 8051 to find the sum of 20 elements in an array.
5. a) Explain the application of Micro-Controller in Data acquisition.

- b) Explain the functional pin diagram of 8051 Microcontroller?
6. What is the difference between ATMEL 89C51 and PIC micro-Controllers? Explain in details.
7. a) Explain the types of JUMP and CALL instructions of 8051 with examples.
b) Write an assembly language program in 8051 to generate a delay of 10 ms.
8. Explain the look-up table conversion mechanism in 8051. Write a look-up table program that converts the hexadecimal numbers (0-F) to its ASCII equivalent. RGPVONLINE.COM
