

Roll No.

24321

**B. Tech. 6th Semester (EE)
Examination – May, 2014**

MICRO CONTROLLER AND EMBEDDED SYSTEM

Paper : EE-308-F

Time : Three Hours]

[M.M. : 100

Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.

Note : Q. 1 of Section A is *compulsory*. Attempt *four* more questions from the *Section B, C, D & E* by selecting at least *one* question from each Section.

SECTION – A

(Compulsory)

1. (a) Compare and contrast microprocessor and microcontrollers. 5
- (b) Discuss the data RAM memory space allocation in the P/C microcontrollers. 5
- (c) Discuss the size of internal RAM in 8051 μ c. 5
- (d) Explain the function of structural units in processors. 5

SECTION – B

2. Explain the architecture details of Embedded Microcontrollers. Also explain the application of Embedded Microcontrollers. 20
3. Explain the function of Interrupts and timers in microcontrollers. 20

SECTION – C

4. By taking the example explain the simple operations like ADD and MOVE using the file register and access bank in P/C μ c. 20
5. Explain the data RAM file register of P/C Microcontrollers. 20

SECTION – D

6. Explain how ADC 808 interfaced with 8051 μ c. 20
7. Explain the programme for the interfacing of 7 segment display to a 8051 μ c with a neat sketch. 20

SECTION – E

8. Explain the Interfacing of processor memory and I/O Devices with embedded systems. 20
9. What do you mean by embedded system ? Explain the various parameters of embedded system. Also explain the embedded system design life cycles. 20
