Roll No. .....

22142

M.E. 1st Semester Electronics & Communication Engg.

Examination–May, 2014

ADVANCED MICROPROCESSOR & MICRO CONTROLLERS

Paper-MEEC-501

Time : 3 hours ***Max. Marks : 100***

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

Note : Attempt any **five** questions out of given eight.

1. (a) Draw and explain the basic Architecture of 8085. *10*

(b) Write a program to add two arrays of ten elements each stored at 2000H and 3000H respectively. Add each element of first array with the respective element of other array and store all the ten results at 4000H. *10*

2. (a) Explain all addressing modes of 8058. *10*

(b) Explain : *10*

(i) LHLD (ii) STA (iii) LXI (iv) STAX (v) XCHG.

3. (a) Why are Boolean processing and bit-addressability provided in 8051 ? *5*

(b) Explain the alternate function of port 0 and port 2. *5*

(c) How many priority levels are provided in 8051 ? *5*

(d) What are the different bit-manipulation operations supported by 8051.

4. (i) Explain SWAP

(ii) Explain CJNE

(iii) Why two return instructions have been provided in 8051 ?

(iv) What program structures are provided in structured programming ?

(v) In what way does a subroutine call differ from an interrupt ? *20*

5. (a) Draw and explain the instruction word Format for 8086. Explain the meaning and tables for each group of bits. *10*

(b) Explain the addressing modes of 68000. *10*

6. (a) Explain the structure and working of parallel I/O serial communication. *10*

(b) Write short notes on UART modem. *10*

7. (a) Explain the interrupt structures of 8086. *10*

(b) What are the steps involved in implementation, testing and design of microprocessor. *10*

8. Write short notes on : *20*

(a) Design tool for microprocessor development

(b) Special I/O devices. (Any **two**).
