M 22452

Reg. No. : .....

Name : .....

V Semester B.Tech. (Including Part Time) Degree (Reg./Sup./Imp.) Examination, November 2012
(2007 Admn. Onwards)
PT 2K6 / 2K6 EC / AEI 506 : MICROPROCESSORS AND MICROCONTROLLERS

Time: 3 Hours Max. Marks: 100

***Instructions** : Assume the suitable data **if any** missing.*
*Answer **all** questions.*

I. 1) Differentiate between effective address and physical address. **5**

2) What does the following mnemonic imply ?
   1) CBW
   2) LES
   3) IMUL
   4) DAS
   5) JBE. **5**

3) What are the functions of an I/O interface ? **5**

4) Write the format of the mode register of 8251. **5**

5) What are the functions of code prefetch unit of 80386 ? **5**

6) What is the function of TSS ? **5**

7) How is AJMP different from SJMP in 8051 ? **5**

8) Write the configuration of SCON register in 8051. **5**

II. A) Discuss the different types of interrupts that can be handled by 8086 processor. **15**

OR

B) Write an assembly language program to find the sum of 'N' numbers of an array. 'N' is stored in the first location. **15**

P.T.O.

III. A) With a block diagram, explain the configuration of 8259. **15**

OR

B) Write an assembly language program to generate a square wave of time period = 1 ms and duty cycle = 50% using 8255. **15**

IV. A) With a functional block diagram, explain the configuration of 80386. **15**

OR

B) Explain the register structure of the Pentium processor. **15**

V. A) Briefly describe the different I/O port configuration of 8051. **15**

OR

B) Write an assembly language program in 8051 to initialize the serial port in mode 1. **15**