

C 26895

Name.....

Reg. No.....

FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
MAY 2012

CS/IT 09 406/PTCS 09 405—MICROPROCESSORS BASED DESIGN

(2009 admissions)

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.

1. What is the function of BIOS ?
2. What are interrupt hooks ?
3. What are the features of DRAM ?
4. Under what situations DMA transfer is preferred over normal data transfer scheme ?
5. Where PCI bus is used ?

(5 × 2 = 10 marks)

Part B

Answer any four questions.

1. What is a modem ? Describe its function.
2. Write a program to find the average of three numbers.
3. With a figure explain how DAC interface works.
4. Write an ISR to find the maximum number in a given series of N numbers, When a key 'A' is pressed ?
5. Write a program to generate a delay of 2 m-sec.
6. With the help of a circuit explain about CMOS RAM and real clock.

(4 × 5 = 20 marks)

Part C

Answer all questions.

1. Explain the components present inside the motherboard of an PC.

Or

2. Explain the maximum mode of operation of 80386.
3. Discuss in detail about addressing modes.

Or

4. What is the function of the following instructions LAHF, LES, XLAT, AAA and SAR.
5. Describe the memory decoding circuit of 80386 processor.

Or

6. Explain about the working of 8253.
7. Describe any one mode of operation of 8259 A.

Or

8. Discuss the operation of ISA BUS.

(4 × 10 = 40 marks)