

C 15655



FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, JUNE 2011

IT 09 406/PTCS 09 405—MICROPROCESSOR BASED DESIGN

(2009 admissions)

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions

1. What is a LAN ?
2. What is the function of operating system ?
3. Differentiate between Real mode and Protected mode of operation of 8086.
4. What is the role played by Cache memory in Pentium processor ?
5. Differentiate between Hardware and Software interrupt.

(5 × 2 = 10 marks)

Part B

Answer any four questions.

1. Bring about the Hardware specification of 8086.
2. What are the types of address decoding ? Explain.
3. Design a square wave generator of 1 kHz using timer 8254.
4. Give the initialization sequence of 8259.
5. Program the VART to transmit 7 bits/character at 2400 bands.
6. Write a program to find how many times a pattern 02 is present in a given array of 10 numbers.

(4 × 5 = 20 marks)

Part C

Answer any four questions.

1. Discuss briefly about the memory and I/O organisation of a PC system.

Or

2. Discuss about serial interface and graphic adapter of a PC system.
3. Write a program to arrange N numbers in descending order.

Or

4. Write a program to separate out odd and even numbers in a given array of N numbers and display their count.
5. Explain the memory decoding circuit of 80486.

Or

6. Explain the working of VART.
7. Describe the operation fo 8279.

Or

8. Explain the working of EISA Bus.

(4 × 10 = 40 marks)