

**B.Tech. COMPUTER SCIENCE AND
ENGINEERING**

Term-End Examination

December, 2013

BICS-012 : MICROPROCESSOR

Time : 3 hours

Maximum Marks : 70

Note : Attempt any seven questions.

Each question carries equal marks.

1. Discuss the addressing modes used in 8086 microprocessor with examples. 10
2. What is a flag register ? Discuss the use of each flag bits of 8086 microprocessor. 10
3. State the features of JMP instructions. Also discuss different types of Jump permissible in 8086 microprocessor with examples. 10
4. (a) What do you mean by the term "Parameter Par Sing" in the context of Procedures ? 5x2=10
(b) What are the differences in functioning of the RET & RET n instructions ?
5. Discuss the interrupt structure of 8086 microprocessor. State the use of software interrupts. 10
6. With neat timing diagram, explain the interrupt acknowledgement cycle of 8086 microprocessor. 10

7. Write the control word for setting Port-A as an input Port and Port-B as an output port in Mode-1. Port C upper and Port C lower are used as control signals. Write instructions to find the status of the signal IBF_A & OBF_B in 8255A. 10
 8. The input frequency to the timer chip 8254. Write a program to generate a square wave of 1.5kHz using Timer 0. 10
 9. Discuss the software and hardware features of 80386 microprocessor. 10
 10. Discuss the upgradations in Pentium Processor over 80486 microprocessor. 10
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