

**B.Tech. – VIEP – COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

June, 2015

00093

BICS-012 : MICROPROCESSOR

Time : 3 hours

Maximum Marks : 70

Note : Attempt any *seven* questions. All questions carry equal marks.

1. Draw the internal architecture of 8086 and explain it. 10
2. What are the various types of addressing modes ? Explain with examples. 10
3. Explain any ten instructions from the instruction set of 8086. 10
4. (a) What are the symbols in flow chart ? Give examples. Draw the flow chart for 'for' and 'while' loops. 5
(b) Define procedure with a neat diagram. Explain the near CALL and far CALL procedures in 8086. 5
5. What are the types of interrupts in 8086 ? Explain the interrupts individually. 10

- 6. (a)** What are the timing applications ? Explain with a neat diagram. 5
- (b)** Explain the process of using an interrupt to produce a real time clock of seconds, minutes and hours. 5
- 7.** What is DMA ? With a neat diagram, explain how a 8237 DMA controller operates in a microcomputer system. 10
- 8.** Draw the block diagram of INTEL 8272A floppy disk controller system. Write the five commands in it. 10
- 9. (a)** Explain how 8088 microprocessor accesses memory and ports, through diagram. 5
- (b)** Compare the architecture of 8086 and 8088. 5
- 10.** Explain the steps for interrupt handling. 10
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