

**B.Tech. – VIEP – ELECTRICAL ENGINEERING
(BTELVI)**

00096

Term-End Examination

June, 2014

BIEE-015 : MICROPROCESSOR AND APPLICATIONS

Time : 3 hours

Maximum Marks : 70

*Note : Attempt any **seven** questions. Assume the missing data if any.*

1. What are the various flags used in 8085 microprocessor ? Explain each flag with examples of their use. 10
2. Describe the format of different types of instructions of 8085 microprocessor. Also discuss about Opcode format. 10
3. Explain the memory read machine cycle for 8085 microprocessor. Give an example of memory read cycle and draw a neat timing diagram for it. 10
4. What are the maskable and nonmaskable interrupts in 8085 ? Explain their use in detail. 10
5. Describe the method of parallel data transfer using 8155. Also draw appropriate block diagram. 10
6. Describe the major components of the 8259 interrupt controller and explain their functions. 10

7. Explain why a latch is used for an output port, but a tri-state buffer can be used for input port. 10
8. What are the basic components of memory interfacing ? Also discuss about Address decoding in 8085. 10
9. Describe the various segment registers used in 8086 microprocessor. Also discuss the use of each memory segment associated with these segment registers. 10
10. Write short notes on any *two* of the following : $5 \times 2 = 10$
 - (a) Macros
 - (b) Cycle stealing
 - (c) Instruction cycle