B.Tech. – VIEP – ELECTRONICS AND COMMUNICATION ENGINEERING (BTECVI)

00640 Term-End Examination
December, 2014

BIEL-015 : MICROPROCESSOR AND ITS APPLICATIONS

Time : 3 hours *Maximum Marks : 70*

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

1. (a) What is the basic difference between a microprocessor and a microcomputer ?   *5*

    (b) Write a short note on PSW in an 8085 microprocessor.   *5*

2. What is a bus ? What are the different types of buses supported by 8085 ? How does the processor send and receive information from memory and I/O devices ? Explain.   *10*

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3. What do you mean by Interrupt ? Differentiate between Software and Hardware interrupt. Also explain enabling, disabling and masking of interrupt.   *10*

4. Discuss briefly 80386 segmentation unit, paging unit and protection.   *10*

5. What do you mean by the minimum mode or the maximum mode ? How can we select a minimum mode ? Name the maximum mode signals.   *10*

6. Write an 8085 assembly language programme to generate the first seven terms of Fibonacci series.   *10*

7. (a) Explain the different bits of 8086 FLAG Register.   *5*

   (b) Explain the working of A/D converter interfacing.   *5*

8. Explain BSR and I/O mode of operation of 8255 with the help of control word.   *10*

9. Write short notes on any *two* of the following :

                                                 2×5=10

   (a) 8257 – DMA Controller

   (b) Interfacing Seven Segment Display

   (c) Interfacing Static RAMs

10. Define opcode and operand. Consider the following instructions of 8085 :

(a) MOV H, L

(b) XCHG

(c) MVI H, 54H

(d) DAD B

(e) ANI 34H

Specify the operand in each of the above instructions and explain the task performed by each of the above instructions. *10*

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