BIEL-036

DIPLOMA – VIEP – ELECTRONICS AND COMMUNICATION ENGINEERING (DECVI)
Term-End Examination

⊓⊓9⊑9   **December, 2017**

BIEL-036 : MICROPROCESSOR

Time : 2 hours   *Maximum Marks : 70*

Note : *Attempt any **five** questions. Question no. **1** is **compulsory**. Use of scientific calculator is permitted.*

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1. (a) What are the functions of an accumulator ?

    (b) What is the difference between a JMP instruction and a CALL instruction ?

    (c) What are the steps involved in fetching a byte in 8085 microprocessor ?

    (d) What is the difference between maskable and non-maskable interrupts ?

    (e) What is Interrupt Service Subroutine ?

    (f) What are the functions of status pin in 8086 microprocessor ?

    (g) What are predefined interrupts in 8086 microprocessor ?   *7×2=14*

2. (a) Describe various registers in 8085 microprocessor with appropriate example. *10*

    (b) Explain the need of program counter. *4*

3. (a) What is meant by Interrupts ? *4*

    (b) Explain various types of priority interrupts in 8085 microprocessor. *10*

4. With a neat block diagram, explain the internal architecture of programmable peripheral interface (8255) and its registers. *14*

5. Explain the interfacing of analog-to-digital (A to D) and digital-to-analog (D to A) converters in 8085 microprocessor with a suitable example. *14*

6. (a) With a neat block diagram, explain the architecture of 8086 microprocessor. *7*

    (b) Write a program to subtract two 8-bit numbers in 8085 microprocessor. *7*

7. Write short notes on any *two* of the following : *2×7=14*

    (a) Multiplexers and Demultiplexers

    (b) 8085 based Data Acquisition System

    (c) Comparison of Microprocessors (8085 and 8086)