

**DIPLOMA - VIEP - ELECTRONICS AND  
COMMUNICATION ENGINEERING (DECVI)**

**Term-End Examination**

**June, 2017**

**00474**

**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.

---

---

1. (a) Enlist the limitations of 8085 microprocessor.
- (b) How many operations are there in the instruction set of 8085 microprocessor ?
- (c) What is the difference between maskable and non-maskable interrupts ?
- (d) What are the different types of write operations using 8253 ?
- (e) Give the physical significance of multitasking.
- (f) What is stack ? Explain the use of it.
- (g) Why is address bus unidirectional and data bus bidirectional ?

$7 \times 2 = 14$

2. Draw and explain the timing diagram of memory read cycle with example. 14
3. (a) Explain 8085 instruction set with suitable example. 7
- (b) Write a program to multiply two 8-bit numbers in 8085 microprocessor. 7
4. With a neat block diagram, explain the internal architecture of Programmable Interval Timer 8253. 14
5. (a) Draw a block diagram to demonstrate the 8085 microprocessor based traffic light control system. 7
- (b) Explain the various interrupts in 8085 microprocessor. 7
6. State the functions of NMI, DT/R, HOLD, BHE, ALE, READY and TEST signals of 8085 microprocessor with examples. 14
7. Write short notes on any *two* of the following:  $2 \times 7 = 14$
- (a) ALU Timing and Control Unit
- (b) Instruction Set of 8086
- (c) Internal Architecture of 80286 Microcontroller

