

Bachelor of Science (B.Sc. I.T.) Semester–III Examination**MICROPROCESSOR AND ALP****Paper–I**

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Draw a well labelled diagram wherever necessary.

EITHER

1. (a) What are the different addressing modes of 8086 ? Explain any two with example. 5
- (b) Explain the flag register format of 8086 μ p. 5

OR

- (c) Explain any three logical instructions used in 8086 μ p with example. 5
- (d) Write an assembly language program to multiply two 8-bit numbers without using MUL instruction. 5

EITHER

2. (a) What is static RAM ? Explain how it can be interfaced to 8086 μ p. 5
- (b) Explain the cycle stealing and burst mode operation of DMA with flow chart. 5

OR

- (c) Explain the interfacing of keyboard. What are the problems associated with it ? 5
- (d) Explain mode-I operation of PPI 8255. 5

EITHER

3. (a) What is interrupt ? What are its types ? Explain. 5
- (b) Differentiate between synchronous and asynchronous data transfer. 5

OR

- (c) Write a short note on DOS and BIOS interrupts. 5
- (d) Write a short note on USART. 5

EITHER

4. (a) Draw a block diagram of internal architecture of 80386 μ p 5
- (b) Explain real mode of operation of 80286 μ p 5

OR

- (c) What is paging and segmentation ? What are their advantages ? 5
- (d) Write a short note on RISC processor. 5

5. Attempt **all** :

- (a) Explain CALL instruction used in 8086 μ p in brief. 2½
- (b) What are the problems associated with interfacing of Display with processor ? 2½
- (c) Write a short note on USB. 2½
- (d) Give any five features of pentium processor. 2½