

Code: CS5T2

**III B.Tech - I Semester – Regular/Supplementary Examinations
October 2019**

**MICROPROCESSOR AND INTERFACING
(COMPUTER SCIENCE AND ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1. a) What are the major responsibilities of BIU in 8086?
- b) Find the physical address of the top of the stack if
SS =0777H and SP =1234H.
- c) Illustrate the Register Indirect Addressing mode of 8086.
- d) List out the flag controlling instructions.
- e) Give the function of ASSUME assembler directive.
- f) What is the purpose of A₁ and A₀ pins in 8255?
- g) Differentiate the interrupt lines INTR and NMI.
- h) What do you mean by Real mode?
- i) What is the difference between 80486DX and 80486SX?
- j) What is the use of VIP flag in Pentium?
- k) What is multi core processor?

PART – B

Answer any ***THREE*** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Discuss the 8086 minimum mode operation with a block diagram. 8 M
- b) Describe the internal architecture of 8086 in detail. 8 M
3. a) Illustrate the Arithmetic instructions of 8086 with examples. 8 M
- b) Develop an Assembly language program to sort out an array of bytes in ascending order. 8 M
4. a) Explain the operation of 8255 based on different modes. 8 M
- b) Demonstrate the interfacing of seven segment display with 8086. 8 M
5. a) Illustrate the architecture of 80286 processor. 8 M
- b) Discuss the advancement of 80486 over 80386. 8 M
6. a) Describe the architecture of Pentium processor. 8 M
- b) Differentiate between Dual Core and Core Duo. 8 M