

16/12/22 (M)

Exam.Code:0927  
Sub. Code: 6573

2122  
B.E. (Electronics and Communication Engineering)  
Third Semester  
EC-303: Microprocessor and Applications

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Explain the following:-
- Interrupt latency in microprocessors
  - Direct memory access
  - Trap Interrupt
  - Role of BIU in 8086 processor
  - Name any two arithmetic instructions
  - Addressing Modes
  - Memory mapped
  - Role of Buses
  - Name control buses
  - ISR

(10x1)

**UNIT - I**

- II. Explain the terms "random access" and "sequential access". Identify the type of access in the following:
- RAM
  - EPROM
- III. Write an 8085 assembly language program, which takes the data from memory location X, and divides this byte by 8, and stores the result at memory location Y.
- IV. a) Explain the architecture of 8085 microprocessor in detail.  
b) Explain the pin diagram of 8085 microprocessor.

(10)

(10)

(2x5)

**UNIT - II**

- V. a) Explain the functions of Counters and timers in processors.  
b) Explain in detail the Johnson Counter.

(2x5)

P.T.O.

(2)

- VI. a) What are vectored interrupts in 8085? Explain each interrupt in brief.  
b) How does the 8259A differentiate between 8-bit and 16-bit microprocessors? (2x5)
- VII. a) Explain the concept of Stack and Subroutine in 8085 microprocessor.  
b) Explain with the help of diagram the 8086 microprocessor. (2x5)

x-x-x