

Exam.Code:0927

Sub. Code: 6565

2074

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. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Explain the following:-

- a) Maskable Interrupt
- b) Direct memory access
- c) Trap Interrupt
- d) Role of EU in 8086 processor
- e) Bus timing and bus standard

(5x2)

UNIT - I

II. Explain Interfacing I/O devices in detail.

(10)

III. Distinguish between the following pairs of instruction:

- a) LXI H, 1234H and LHLD 1234H;
- b) LDA F900H and STA F900H;
- c) MVI M, 8DH and LXI H, 008DH;
- d) LHLD FA00H AND SHLD FA00H.

(10)

IV. a) 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.

b) Explain the architecture of 8085 microprocessor in detail.

(2x5)

UNIT - II

V. a) Explain in detail the Hexadecimal Counter.

b) Explain the 8254 programmable interval timer

(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 following terms:
i) Virtual memory
ii) Numeric data processor 8087
b) Explain the concept of Stack and Subroutine in 8085 microprocessor. (2x5)

x-x-x