Exam.Code:0934
Sub. Code: 33755

2055

B.E. (Electrical and Electronics Engineering)

Fourth Semester

PC-EE-404: Microprocessor and Microcontroller

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. Attempt the following:_

a) What is a nested subroutine?

b) Discuss function of Address latch in 8085?

c) Explain Interrupt Service Routine?

d) How does 8085 differentiate between code and data?

e) Discuss function of Register B in 8051. (5x2)

UNIT - I

II. a) WAP to count from 0 to F with a 2 second delay between each count and repeats the Sequence continuously. Use register pair DE to setup the delay, display count at Output port F3H. CLK freq = 1 MHz

b) Discuss peripheral initiated operations in 8085 (6,4)

III. a) A string of 50 data bytes is stored starting from memory location 2500H. WAP to reject all odd numbers and save all even numbers at 3500H onwards.

b) Discuss the Addressing Modes of 8085 quoting examples from the above program. (6,4)

IV. a) Draw timing diagram of instruction OUT F3H

b) Discuss Inerrupts in 8085 qualitatively. (5,5)

UNIT - II

V. a) Discuss 8051 memory.

b) Design a schematic for interfacing a memory IC 2732 (4K x8) with 8085 Using a 74LS138 (3 to 8 decoder), thereby generating address range for the Memory IC C000H to CFFFH. (4,6)

VI. a) Discuss BSR mode I/o mode of 8085.

b) Explain interfacing of a seven segment display with 8085. (4,6)

VII. Write short notes on any three of the following:-

(a) Memory Mapping vs Peripheral Mapping

(b) RS 232C

(c) Push & Pop vs Call & Return

(d) Interrupt Priority (4,3,3)

x-x-x