Roll No. ....

Total No. of Questions : 13]   **[Total No. of Pages : 02**

Paper ID [A0215]

(Please fill this Paper ID in OMR Sheet)

BCA (305) (S05) (O) (LE) (Sem. - 3rd)

INTRODUCTION TO MICROPROCESSOR

Time : 03 Hours   **Maximum Marks : 75**

Instruction to Candidates:

> **1)** Section - A is **Compulsory**.
>
> **2)** Attempt any **Nine** questions from Section - B.

Section - A

Q1)   *(15 × 2 = 30)*

a)   Define Microprocessor.

b)   What is a stack pointer?

c)   What is a program counter?

d)   What are the various flags used in 8085.

e)   What are software Interrupts?

f)   What is the clock frequency of 8085?

g)   What is Tri-state-logic?

h)   Define Instruction and machine cycle.

i)   Mention the priority of Interrupts in 8086.

j)   Give examples of Maskable Interrupts.

k)   What does BIU do?

l)   What is the maximum addressing capacity of 8086?

m)   What is a Interrupt controller.

n)   What is DMA?

o)   What is 80 x 87?

A-72   *P.T.O.*

Section - B

(9 × 5 = 45)

Q2) What are the various flags used in 8085. Also show the bit position of various flags in 8085 flag register.

Q3) Draw the pin configuration of 8085 and explain the functional usage of each pin in detail.

Q4) Classify the different groups of 8085 instruction set with example.

Q5) Write a subroutine to clear the flag register and accumulator.

Q6) Draw the timing diagram of I/O read cycle in 8085 and explain it.

Q7) With suitable example, explain the addressing modes of 8085.

Q8) What is the difference between MIN and MAX mode of 8086?

Q9) Explain the architecture of 8086.

Q10) What is the size of flag register in 8086? Explain all available flags in detail.

Q11 Explain the process of DMA and the function of various elements of 8237.

Q12) What is interrupt controller? Discuss the architecture of 8257 interrupt Controller.

Q13) What is the format of Assembly Language of 8085.

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