Roll No.....

Total No. of Questions : 09] [Total No. of Pages : 02

Paper ID [CS208]

(Please fill this Paper ID in OMR Sheet)

B. Tech. (Sem. - 4th)

MICROPROCESSOR & ASSEMBLY LANGUAGE PROGRAMMING

(CS - 208)

Time : 03 Hours **Maximum Marks : 60**

Instruction to Candidates:

1) Section - A is **Compulsory**.
2) Attempt any **Four** questions from Section - B.
3) Attempt any **Two** questions from Section - C.

Section - A

Q1) *(10 × 2 = 20)*

a) How many address lines are necessary to address two megabytes of memory?

b) While executing a program, when the 8085 µP completes the fetching of machine code located at memory address 2057H, what will be the contents of program counter?

c) Show the timing diagram for opcode fetch operation.

d) Why the number of O/P ports in peripheral mapped I/O is restricted to 256?

e) Start : IN F2H
CMA
ORA A
JZ : start
What will be the result for this program?

f) What is the function of Accumulator?

g) Give logical group instructions for 8085 µP.

h) Give brief idea about motorola 68000.

i) Discuss DMA Controller briefly.

j) Give timing and control signals for 8085 µP.

Section - B

(4 × 5 = 20)

Q2) Differentiate and explain UART & USART in data transfer operation.

Q3) Write an assembly language program for 16 bit multiplication.

Q4) Discuss various addressing modes for 8085 µP with suitable examples.

Q5) Discuss PSW in detail for 8085 µP.

Q6) Show and explain the interfacing of seven segment display with microprocessor.

Section - C

(2 × 10 = 20)

Q7) What do you meant by register? Discuss various registers of 8085 µP.

Q8) What is the function of 8251 chip? Discuss in detail.

Q9) What is microcontroller? Discuss the architecture for 8051 microcontroller.

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