Roll No. ....

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

B.Tech. (Sem. - 4th)
MICROPROCESSORS & ASSEMBLY LANGUAGE PROGRAMMING
SUBJECT CODE : CS - 208
Paper ID : [A0461]

[Note : Please fill subject code and paper ID on OMR]

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) What are the opcode, data type and operand in the instruction MOV AH, 7?

b) Define instruction cycle and machine cycle.

c) What are the various status signals used in 8085?

d) What is the function of accumulator?

e) List any four unconditional branch instructions.

f) Name the two modes used by the DMA processor to transfer data.

g) Why do you need a driver in between the microcontroller and the stepper motor?

h) What are the various components of emulator?

i) What are register banks in 8051 microcontroller?

j) What is the purpose of CLK signal in an 8086 system?

Section - B

(4 × 5 = 20)

Q2) Describe the bus architecture of 8085.

Q3) Write an 8085 assembly language program to convert 8 bit binary to ASCII code.

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Q4) Draw the circuit for interfacing processor, memory and I/O devices through DMA.

Q5) Explain in brief about ROM Emulator and In-Circuit-Emulator.

Q6) Explain the external program memory interface of 8051.

Section - C

(2 × 10 = 20)

Q7) Explain in detail about the various addressing modes used in 8085. Give examples.

Q8) With a neat diagram, explain how 8251 is interfaced with 8085 and used for serial communication.

Q9) Describe the interfacing of keyboards with microprocessor.

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