

TIME: 2 1/2 HOURS Microprocessor

MARKS: 75

N.B: ALL QUESTIONS ARE COMPUSORY
FIGURES TO THE RIGHT INDICATE FULL MARKS.

6.3.20

Q.1 ANSWER THE FOLLOWING (ANY THREE): 15

- A) Explain the microprocessor instruction set.
- B) Explain the working and architecture of mainframe computers
- C) Interface 2 K ROM and 1 K RAM with 8085 microprocessor
- D) Interface 1 K ROM and 4 K RAM with 8085 microprocessor
- E) Explain the block diagram of 8085
- F) Explain the process of trouble shooting.

Q.2 ANSWER THE FOLLOWING (ANY THREE): 15

- A) Explain the process of interfacing output display circuits
- B) Explain the concept of memory mapped IO.
- C) Write an 8085 assembly level program to subtract two numbers stored at C030 and C032. Store the result from C032.
- D) Write an 8085 assembly level program to multiply two numbers stored at C030 and C031. Store the result from C032.
- E) Describe the various types of jump instructions.
- F) Describe arithmetic instruction in 8085

Q.3 ANSWER THE FOLLOWING (ANY THREE): 15

- A) Describe the 16 bit arithmetic in 8085 with examples
- B) Describe counting instructions of 8085 with examples
- C) Describe the rotate instructions of 8085 with examples
- D) Explain the hexadecimal counters
- E) Describe the call instructions
- F) Describe the concept of stacks

Q.4 WRITE SHORT NOTES ON (ANY THREE): 15

- A) BCD to binary conversion
- B) Binary to seven segment conversion
- C) BCD addition
- D) Operating system
- E) Assemblers
- F) 8085 Interrupts

Q.5 WRITE SHORT NOTES ON (ANY THREE): 15

- A) Special Pentium register
- B) Pentium pro instruction
- C) Core 2 processor
- D) i3 processor
- E) Architecture of SUN SPARC microprocessor
- F) Data types of SUN SPARC microprocessor