

**MICROPROCESSOR & INTERFACING/  
MICROPROCESSOR & APPLICATIONS**

Time: Three Hours

Maximum: 75 Marks

**SECTION -A (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 1 a Briefly explain about bus structure in 8085.  
OR  
b Write short notes on internal data operations in 8085.
- 2 a Explain the address decoding and memory addresses.  
OR  
b Briefly explain about the pinout and signal details in 8085 microprocessor.
- 3 a Write short note on compare instructions.  
OR  
b Discuss the differences between continue loop and conditional loop.
- 4 a Write an assembly language program for block of data transfer.  
OR  
b Write an assembly language program for 1's and 2's complement of 8-bit numbers.
- 5 a Explain about design of ring counter.  
OR  
b Briefly explain about control word.

**SECTION -B (45 Marks)**

Answer any THREE questions

ALL questions carry EQUAL Marks (3 x 15 = 45)

- 6 Explain in details about memory classifications in 8085 microprocessor.
- 7 Explain the 8085 microprocessor architecture with neat block diagram.
- 8 Explain the following operations with suitable examples :  
(i) Arithmetic Operations (ii) Logical operations
- 9 Write an assembly language program for multiplication of two 8 bit numbers.
- 10 Explain in details about various operating modes in the PPI 8255.