Time: Three hours

Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer any TEN questions.

- 1. What are the registers generally contained in the processor?
- 2. Define "Addressing Mode".
- 3. 'What is pipelining?
- 4. Write down the functions of CPU.
- 5. What is an array processor?
- 6. What do you mean by microprocessor?
- 7. Define "ASCII Code".
- 8. What are functions of data bus?
- 9. What is a flag?
- 10. What is the action of MOV B, A?
- 11. What are the basic features of advanced microprocessors?
- 12. Define the term "BCD".

## PART B — $(5 \times 5 = 25 \text{ marks})$

## Answer any FIVE questions.

- 13. Elaborate the types of instructions that perform the logical operations.
- 14. What are the components of instruction format? Describe.
- 15. How will convert ASCII to binary conversions? Explain with example.
- 16. How will you perform BCD subtraction? Explain with simple example.
- 17. Summarize the functions of Intel's Pentium 15 Processor.
- 18. Explain the overview of the 8085 instruction set.
- 19. Mention the operations of vectored interrupts in 8085.

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

## Answer any THREE questions.

- 20. Illustrate the register transfer language with example.
- 21. What is a stack? What are the operations performed on stack? Describe.

- 22. Discuss the general architecture of 8085 microprocessor.
- 23. How will you perform BCD to ASCII conversions? Explain with simple example.
- 24. What is DMA? Explain the block diagram of DMA also describe how DMA is used to transfer data from peripherals.