

**Second Year Examination of the Three Year
Degree Course, 2001
(Faculty of Science)
COMPUTER SYSTEM ARCHITECTURE
First Paper
(COMPUTER SCIENCE)**

Time : 3 Hours
[Maximum Marks :50]

Attempt **any five** questions,
selecting at least **one** question from each unit,
All questions carry equal marks.

UNIT - I

- 1.(a) What are the different addressing modes used in 8085 microprocessor? Explain giving examples. 8
(b) What are different registers available for programming in 8085 microprocessor. 2
2. Explain the role and significance of following signals in 8085 microprocessor : 10
(i) S_1 and S_2
(ii) ALE
(iii) IO/\bar{M}
(iv) HOLD
(v) NMI

UNIT-II

- 3- What are different arithmetic operations available for 8085 microprocessor? What are zero, Auxiliary carry, parity and carry flags and when they are set? 10

4. Write an assemble language program to transfer 16 bytes of data from memory location starting from 2020 H to memory location starting from 3020 H. 10

UNIT-III

5. What are the different arithmetic micro-operations? Explain the operation using examples. 10
6. Compare 32 bit processors of Intel and Motorola. What is a microprogrammed computer? 10

UNIT-IV

7. What is Cache memory? Explain working of a Cache memory. 10
- 8.(a) What is Stack? Explain its use and the different operations on it. 5
- (b) Explain working of Random access memory. 5

UNIT-V

9. Explain working of DMA data transfer. Compare it with programmed I/O and interrupt driven data transfer. 10
10. Explain **any two** of the following : 10
- (i) RS 232 C interface.
- (ii) Pipe line processor
- (iii) IEE 488