

**FACULTY OF ENGINEERING**

**B.E. (CSE) IV-semester (AICTE) (Backlog) (New) Examination, February/March 2023**  
**Subject: Computer Organization**

**Time: 3 Hours**

**Max. Marks: 70**

**Note: (I) First question is compulsory and answer any four questions from the remaining six questions. Each Questions carries 14 Marks.**  
**(II) Answer to each question must be written at one place only and in the same order as they occur in the question paper.**  
**(III) Missing data, if any, may be suitably assumed**

1. (a) Write the basic performance equation.  
(b) State the types of Read-Only memories.  
(c) Define microprocessor and microcomputer.  
(d) Specify the addressing mode and number of byte occupies in memory for the following instruction.  
(e) How many number of T-states are required for MVI A, 30?  
(f) Define and list the 8085 vectored interrupts.  
(g) What is RS 232 C?
2. (a) Explain the implementation of interrupt priority and its schemes.  
(b) Write a short note on Performance of a computer.
3. (a) Discuss the cache mapping functions with suitable diagrams.  
(b) What is virtual memory? Explain in detail?
4. (a) Explain the 8085 microprocessor architecture with a neat diagram.  
(b) List and describe the 8085 rotate instructions.
5. (a) Draw and explain the programmable interrupt controller(8259)  
(b) Define stack and explain stack instructions with examples.
6. (a) Describe the 8251(PCI) interfacing device with a neat diagram.  
(b) Write a short note on IEEE 488.
7. (a) Explain the functional units of a computer.  
(b) Write an ALP to transfer 100 bytes from 8500H to 9500H.

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