

<b>Seat No.</b>	
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**S.Y. B.Tech. (CSE) (Part - II) (Semester - III) (CBCS)**  
**(Revised) Examination, January - 2023**  
**MICROPROCESSORS**  
**Sub. Code : 73280**

**Day and Date : Monday, 30 - 01 - 2023****Total Marks : 70****Time : 10.30 a.m. to 1.00 p.m.**

- Instructions :**
- 1) Question 3a is Compulsory and solve any one question from Q.3b and Q.3c.
  - 2) Question 6a is Compulsory and solve any one question from Q.6b and Q.6c.
  - 3) Figures to the right indicate full marks.

**Q1) Solve any two Question.**

- a) Write a short note on classification of instruction based on functionality. [6]
- b) Write a short note on following data transfer instructions related to 8085. [6]
  - i) MVI
  - ii) LDA
  - iii) PUSH
- c) With a neat diagram explain 8051 Microcontroller. [6]

**Q2) Solve any two Question.**

- a) Write a short note on any Three of the following multipurpose registers. [6]
  - i) Accumulator (AX)
  - ii) Base index (BX)
  - iii) Count (CX)
  - iv) Data (DX)
- b) In context with data-addressing Modes, write a short note on any Two of the following. [6]
  - i) Register Addressing
  - ii) Immediate Addressing
  - iii) Register Indirect Addressing

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- c) Explain direct program memory addressing in context with program memory-addressing modes. [6]

- Q3)** a) With neat diagram explain machine language. [6]  
b) With example explain LEA instruction and offset. [5]

OR

- c) With example write a short note on register addition arithmetic instruction. [5]

**Q4)** Solve any two Question.

- a) Write 8086 Instruction with example for:  
i) To Convert Positive number stored in AH register To Negative & Convert Negative Number Stored in AL register to Positive. [4]  
ii) Clear the contents of any register using logical instructions? [2]  
b) Write 8086 program to find and store register number from the list of 5 numbers. Using Test instruction? [6]  
c) List and explain program control instructions? [6]

**Q5)** Solve any two Question.

- a) Explain the functions of 8086 group of pins: [6]  
i) Address Bus  
ii) Bank Enable  
iii) Data Bus  
b) Draw and Explain programming model for 80386? [6]  
c) Draw and explain control register structure of 80386? [6]

- Q6)** a) List the features of Pentium Pro Microprocessor? [6]  
b) Find the Segment start and end address if Base address is 10000000H and Limit is 0011FFH When G = 0 and G = 1? [5]

OR

- c) Explain Multicore Technology? [5]

