

Total No. of Questions : 4]

SEAT No. :

PA-4978

[Total No. of Pages : 2

**[6008]-230**

**S.E. (Computer) (Insem.)**

**MICROPROCESSOR**

**(2019 Pattern) (210254) (Semester - II)**

**Time : 1 Hour**

**[Max. Marks : 30**

**Instructions to the candidates:**

- 1) Answer Q1 or Q2, Q3 or Q4.
- 2) Figures to the right indicate full marks.

**Q1) a) Explain the architecture of the 80386 microprocessor with an appropriate diagram. [5]**

**b) Describe the following addressing modes of 80386 with example [6]**

i) Index addressing mode

ii) Direct addressing mode

iii) Based index mode

**c) Describe the use of various 80386 Data Movement Instructions in assembly language programming with examples. [4]**

**OR**

**Q2) a) Describe the various operating modes of 80386. [5]**

**b) Describe the following addressing modes of 80386 with example [6]**

i) Register addressing mode

ii) Register Indirect addressing mode

iii) Immediate addressing mode

**c) Explain the General Registers and Segment Registers of 80386 with an appropriate diagram. [4]**

**P.T.O.**

- Q3)** a) Explain the 80386 processor state after Reset. [5]  
b) Draw and Explain Read Cycle with non-pipelined address timing. [5]  
c) Draw and Explain Control Registers of 80386. [5]

OR

- Q4)** a) Explain the following signals [5]  
i) INTR  
ii) ADS#  
iii) READY#  
iv) HOLD  
v) NMI  
b) Draw and explain the Write Cycle with non-pipelined address timing. [5]  
c) Draw and Explain Debug Registers of 80386. [5]