

Total No. of Questions : 4]

SEAT No. :

PF214

[Total No. of Pages : 2

APR-26/SE/Insem-263

S.E. (Computer Engineering) (Insem)

MICROPROCESSOR

(2019 Pattern) (Semester-IV) (210254)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2 and Q.3 or Q.4.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Assume suitable additional data, if necessary.

**Q1)** a) Explain features of 80386 processor which made it an advanced processor. [5]

b) Explain any five String and Character Transfer Instructions. [5]

c) Explain following addressing modes in 80386 processor with example. [5]

- i) Direct addressing mode
- ii) Based-index addressing mode
- iii) Based-scaled-index addressing mode

OR

**Q2)** a) Explain architecture of 80386 microprocessor with block diagram. [5]

b) Explain following instructions. [5]

- i) MUL
- ii) DIV
- iii) CMP
- iv) ADC
- v) INC

c) Explain following addressing modes in 80386 processor with example. [5]

- i) Immediate addressing mode
- ii) Register addressing mode
- iii) Register Indirect addressing mode

P.T.O.

- Q3) a)** Explain following signals. [5]
- i) HOLD
  - ii) HLDA
  - iii) NMI
  - iv) PREQ
  - v) RESET
- b) Draw and explain write cycle with non pipelined address timing. [5]
- c) Draw and explain debug registers of 80386 processor. [5]

OR

- Q4) a)** Explain Processor State after Reset. [5]
- b) Draw and explain read cycle with non pipelined address timing. [5]
- c) Explain Machine Status Word with diagram. [5]

