

Total No. of Questions : 4]

SEAT No. :

PB26

[Total No. of Pages : 2

[6268]-220

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) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) All questions carry equal marks.
- 5) Assume suitable data, if necessary.

Q1) a) Explain architecture of 80386 microprocessor with block diagram. [5]

b) Explain following instructions [5]

- i) MOV
- ii) PUSH
- iii) POP
- iv) CBW
- v) MOVSX

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

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

OR

Q2) a) Draw and elaborate programmers model of 80386 processor. [5]

b) With necessary example, explain various Decimal Arithmetic Instructions. [5]

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

- i) Direct addressing mode
- ii) Index addressing mode
- iii) Based-scaled-index with displacement addressing mode

P.T.O.

- Q3)** a) What are the contents of various registers of 80386 processor after reset? [5]
b) Draw and explain read cycle with non pipelined address timing. [5]
c) Draw and explain control registers of 80386 processor. [5]

OR

- Q4)** a) Explain following signals [5]
i) BE0# - BE3#
ii) ADS#
iii) D/C#
iv) W/R#
v) BS16#
b) Draw and explain write cycle with non pipelined address timing. [5]
c) Explain following system flags: [5]
i) NT
ii) IOPL
iii) IF
iv) VM
v) RF

