

Total No. of Questions : 4]

SEAT No. :

PB26

[6268]-220

[Total No. of Pages : 2

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

