May-2018

Total No. of Questions—8] [Total No. of Printed Pages—2

Seat No.	

[5352]-569

S.E. (Computer) (II Sem.) EXAMINATION, 2018

MICROPROCESSOR

(2015 COURSE)

Time : Two Hours **Maximum Marks : 50**

N.B. :— (*i*) Answer Q. No. 1 or Q. No. 2, Q. No. 3 or Q. No. 4, Q. No. 5 or Q. No. 6, Q. No. 7 or Q. No. 8.
(*ii*) Neat diagram must be drawn whenever necessary.
(*iii*) Figures to the right indicate full marks.
(*iv*) Assume suitable data, if necessary.

1. (*a*) Explain immediate and register addressing mode with an example. [2]
(*b*) Draw and explain the flag register of 80386. [4]
(*c*) Draw and explain segment descriptor. [6]

Or

2. (*a*) What is the use of Interrupt Flag ? [2]
(*b*) Explain paging machanism. [4]
(*c*) Draw and explain the 80386 address translation machanism considering PG bit in CR0 in set. [6]

3. (*a*) What is CPL and RPL ? [2]
(*b*) Explain Interrupt no. 0 and 4. [4]
(*c*) Explain the role of Task Register in multitasking and the instructions used to modify and read TR. [6]

P.T.O.

Or

4. (*a*) List five aspects of protection in the 80386. [2]
   (*b*) Write a short note on 'I/O permission Bit Map'. [3]
   (*c*) Draw and explain TSS. [7]

5. (*a*) Write short note on Virtual 8086 Mode. [3]
   (*b*) Explain software initializations required for protected mode. [4]
   (*c*) Draw and explain structure of the TLB. [6]

Or

6. (*a*) What are the contents of various registers of processor 80386 after reset ? [3]
   (*b*) Explain entering and leaving V86 mode. [4]
   (*c*) Draw and explain debug registers of the 80386. [6]

7. (*a*) Explain the following signals : [3]
   (*i*) W/R##
   (*ii*) D/C#
   (*iii*) M/IO#
   (*b*) Explain any *four* 80387 constant instructions. [4]
   (*c*) Draw read cycle with non-pipelined address timing. [6]

Or

8. (*a*) Explain the following signals : [3]
   (*i*) INTR#
   (*ii*) NMI#
   (*iii*) RESET#
   (*b*) Draw and explain 80387 register stack. [4]
   (*c*) Explain any *six* 80387 data transfer instructions. [6]