

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 mechanism. [4]

(c) Draw and explain the 80386 address translation mechanism 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]