

Total No. of Questions—8]

[Total No. of Printed Pages—3

Seat No.	
-------------	--

[5057]-257

S.E. (Comp. Engg.) (Second Semester) EXAMINATION, 2016

MICROPROCESSOR AND INTERFACING TECHNIQUES

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Answer Q. Nos. 1 or 2, Q. Nos. 3 or 4, Q. Nos. 5 or 6, Q. Nos. 7 or 8.

(ii) Neat diagrams must be drawn wherever necessary.

(iii) Figures to the right indicate full marks.

1. (a) Compare 8086, 80386 and i7 processor on the basis of architectural features. [4]
- (b) List the differences between .com and .exe. [4]
- (c) List and explain 80386 bus cycles required to fetch and execute the instruction IN AX, 3C H. [4]

Or

2. (a) Explain base addressing mode. Indicate your answer with examples of instructions using these addressing mode with respect to 80386. [4]
- (b) Draw and explain IVT. [4]

P.T.O.

- (c) Write initialization instructions for 8259 to meet the following specifications : [4]
- (i) Interrupt type 64
 - (ii) Level triggered, Single, ICW4 needed.
3. (a) Explain the difference between synchronous and asynchronous serial communication. [3]
- (b) Explain in brief port structure of 8255 PPI. [5]
- (c) What are different sources of errors in DAC ? [4]

Or

4. (a) Prepare a control word to initialize 8279 in the following given keyboard/display mode : [4]
- (i) 16, 8-bit character left entry
 - (ii) Decoded scan n-key rollover.
- (b) Give the control word format for 8253/8254. [4]
- (c) Explain with a neat diagram sequence of DMA operation. [4]
5. (a) Draw and explain maximum mode configuration of 8086. [7]
- (b) Write notes on the following supporting chips : [6]
- (i) 8284
 - (ii) 8286
 - (iii) 8288.

Or

6. (a) Draw and discuss the interface between 8086 and 8087. [7]
(b) Explain the data format for 8087 NDP in brief. [6]
7. (a) Draw and explain block diagram of Intel Core i5. [7]
(b) Explain the features of 82801 IJR I/O Controller Hub. [6]

Or

8. (a) Draw and explain block diagram of x58 chip set. [7]
(b) Write a short note on Serial ATA controller and QIP Technology. [6]

stupidstupid.com

