

(3 Hours)

[Total Marks: 80]

NB: 1. Question No.1 Compulsory.

2. Solve any THREE from Q.2 to Q.6

3. Assume suitable data whenever necessary with justification.

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- Q1 Solve any **FOUR**
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|---|----|
| (A) Explain Segmentation in 8086 Processor.                   | 05 |
| (B) Give different bits of Control Register-0 (CR0) of 80386. | 05 |
| (C) Explain Branch Prediction Logic.                          | 05 |
| (D) Explain Flag Register bits of 8086.                       | 05 |
| (E) Explain Virtual Mode (VM86) 80386 Processor.              | 05 |
- Q2. (A) Draw & Explain architecture of 8086 Processor with example. 10  
(B) Explain Block diagram of PPI 8255. 10
- Q3. (A) Explain Maximum mode of 8086 Processor. 10  
(B) Explain modes of PIT8254. 10
- Q4. (A) Explain Interrupt Structure of 8086 Processor. 10  
(B) Explain Branch Prediction Logic of Pentium Processor. 10
- Q5. (A) Explain TSS in details. 10  
(B) Explain data Cache architecture for Pentium Processor. 10
- Q6. (A) Explain SPARC Processor with block diagram. 10  
(B) Explain block diagram of PIC8259. 10