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CII1331

Microprocessor - III
(New) (1070)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :
1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any two** subquestions from each unit.
5. Draw neat diagrams wherever necessary.
6. Assume suitable data if necessary.
7. Figures to the right indicate full marks.

UNIT - I

1. a) Draw and explain internal architecture of 80386. 10

   b) Explain in detail extended features of 80386. 10

   c) Differentiate between 80386 SX and 80386 DX. 10

UNIT - II

2. a) Explain in detail memory management unit (MMU) of 80386. 10

   b) Explain with neat sketch how linear address is converted into physical address using paging unit of MMU. 10

   c) Explain all debug registers of 80386 in detail. 10

UNIT - III

3. a) Explain call gate mechanism of 80386 in protected mode. 10

   b) Explain with neat diagrams TSS and TSS descriptor of 80386. 10

   c) Write short notes on-
      i) Extension to TSS.
      ii) I/O permission bitmap. 10

UNIT - IV

4. a) Differentiate among 80387, 80287 and 8087. NDP. **10**

    b) Draw and explain internal architecture of 80387 NDP. **10**

    c) Explain in detail how interrupt and exceptions are handled in VM86 mode. **10**

UNIT - V

5. a) Draw and explain pentium architecture. **10**

    b) Write short note on Intel Chipsets. **10**

    c) Write short notes on - **10**

    i) Pentium I Motherboard.

    ii) Pentium II motherboard.

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