Code No.: AD305PC   R20   H.T.No. | | 8 | R | | | | |

[Time: 3 Hours]   [Max. Marks: 70]

Note: This question paper contains two parts A and B.
    Part A is compulsory which carries 20 marks. Answer all questions in Part A.
    Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A   (20 Marks)

1. a) Define Computer Organization.   [2M]
   b) Define control unit.   [2M]
   c) Define Instruction.   [2M]
   d) What is Assembler?   [2M]
   e) Write an ALP to Add two 8 bit numbers?   [2M]
   f) Mention Significance of 'O' flag.   [2M]
   g) Define interrupt.   [2M]
   h) Define IOP.   [2M]
   i) Define cache Memory.   [2M]
   j) Define Main Memory.   [2M]

PART-B   (50 Marks)

2. Explain in detail about Block diagram of Digital Computer.   [10M]
                              OR
3. Explain in detail about Various Phases of Instruction Cycle.   [10M]

4. Explain the architecture of 8086 processor with neat Diagram.   [10M]
                              OR
5.a) Write about the Physical Memory Organization of 8086.   [4M]
  b) Describe about the assembler directives in 8086 microprocessor with examples. [6M]

6. Explain in detail about Interrupt Cycle of 8086.   [10M]
                              OR
7. Write the ALP to add two 16 bit numbers.   [10M]

8. Explain in detail about Addition Computer Arithmetic Algorithm. [10M]
                              OR
9. Explain about Floating Point Arithmetic Operations.   [10M]

10. Explain about the Memory Hierarchy and Main Memory.   [10M]
                              OR
11. Differentiate between Auxiliary Memory, Associate Memory and Cache Memory. [10M]
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