COMPUTER ARCHITECTURE AND ORGANIZATION

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. (a) Give the 2's complement representation of $(11100110)_2$.

 (b) What is the full form of ASCII and EBCDIC ?

 (c) What do you mean by radix ?

 (d) Convert $(111000111110)_2 = (?)_8$

 (e) Convert $(756\cdot25)_{10} = (?)_2$

 (f) What do you mean by fixed and floating point representation ?

 (g) What is DMA controller ?   2×7=14

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2. What do you mean by addressing modes ? Explain about different types of addressing modes. 2+12=14

3. Write short notes on any *two* : 2×7=14

   (a) Magnetic tape

   (b) Auxiliary storage device

   (c) Addressing of I/O device.

4. (a) Give the design of micro-program control unit. 10

   (b) What do you mean by synchronization ? 2

   (c) What is polling ? 2

5. (a) What are the different components of ALU ? Draw the diagram. 10

   (b) What do you mean by VDU ? 4

6. (a) What are the different types of printers ? 7

   (b) Explain about memory of computer. 7