(DCS 223)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the End of Second Year)

COMPUTER SCIENCE

Paper - III : Computer Organization

Time : 3 Hours

Maximum Marks : 75

Answer question No.1 compulsory	$(5 \times 3 = 15)$
Answer ONE question from each unit	$(4 \times 15 = 60)$

1) Write a short note on :

- a) BUS & Memory Transfer.
- b) Control Memory.
- c) Main Memory.
- d) Addition and Subtraction in signed Magnitude.
- e) DMA (Direct Memory Access)

<u>UNIT - I</u>

2) Explain about Instruction codes and computer registers.

OR

3) List and Explain various Arithmetic Microoperations.

<u>UNIT - II</u>

4) Explain different types of addressing modes with an example.

OR

5) Design of control unit. Explain in detail.

<u>UNIT - III</u>

6) Explain about Booth's Algorithm, with Flowchart.

OR

- 7) a) What is virtual Memory? Explain its features.
 - b) Explain the concept of ROM.

<u>UNIT - IV</u>

8) Differentiate : Isolated I/O and Memory Mapped I/O.

OR

9) Explain in detail about IOP.

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