DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – Sept./Oct. 2019

Course: B. Tech in Information Technology   Sem: III

Subject Name: Computer Architecture & Organization   Subject Code: BTCOC304

Max Marks: 20   Date:- 07/10/2019   Duration:- 1 Hr.

Instructions to the Students:

1. Assume suitable data wherever necessary and mention it clearly.
2. Figures to right indicate full marks.

	(Level/CO)	Marks

Q. 1   Attempt the following.   1 X 6

1. Write 2's complement representation of -10 and +10.   CO1

   A) 0110, 1010   B)1010, 0110   C) 0101, 1010   D) 1010, 0101

2. What is the result of multiplication of unsigned integers 1011 x 1101.   CO1

   A) 0001111   B) 1001111   C)1000111   D) 0000111

3. How many representations are there for 0 (zero) in 1's compliment   CO1
   representation.

   A) One   B) Two   C) Three   D) No Representation

4. The interconnection mechanism that connects major computer components   CO1
   (processor, memory, I/O) is called _____

   A) Component Bus   B) System Bus   C) Main Bus   D) Major Bus

5. Assembler directives are commands that are understood by the _____   CO1

   A) Compiler   B) Assembler   C) CPU   D) Control Unit

6. Instruction register (IR), contains the 8-bit opcode instruction being   CO1
   executed. The statement is:

   A) True   B) False

Q.2   Solve Any Two of the following.   3 X 2
(A)   Draw and explain von-Neuman's architecture.   CO3
(B)   Explain any two addressing modes with diagram.   CO1
(C)   Differentiate between RISC and CISC architecture.   CO3

Q.3   Solve Any One of the following.   8 X 1
(A)   Sketch and explain flowchart for Booth's algorithm.   CO4
(B)   Explain in detail data flow during an instruction cycle.   CO4

*** End ***