

**Department of Computer Science and Engineering
FS BE III CSE 1503 Computer Organization**

Date: 17th August, 2023

Time: 9:30 to 10:30 am

Max Marks: 20

Q.1

- 1) Draw and explain the circuit for addition of sign – 2's complement numbers. [3]
- 2) Determine the logic operation that will selectively set bits in register A in those positions where there are 0's in the bits of register B. [2]
- 3) What is the minimum size required for MAR if memory addressed has size 8K X 16? [2]
- 4) Explain importance of Bus Organization in a processor unit. [4]

Q.2

- a) Draw and explain design of One Stage of Logic Circuit briefly. [5]
- b) List out the methods of designing Control Organization and explain briefly any two of them. [4]
