

**Department of Computer Science and Engineering**  
**CSE1503 COMPUTER ORGANIZATION**  
**First Semester 2022-23 Mid Semester Test**

Date: 8.10.22

Time: 12:00 – 1:00

Max Marks: 20

Q.1

- (a) Discuss addition of sign-2's complement numbers and implement with digital function. How overflow can be taken care during the same? [5]

- (b) Explain design procedure of one typical stage of the accumulator. [5]

Q.2

ATTEMPT ANY TWO.

[10]

- (a) What is the importance of the Bus Organization in Processor Organization? Discuss with suitable example.

- (b) How PLA Control method is functioning? Compare it with other methods used for control mechanism of the processor.

- (c) Write a microprogram that compares two unsigned numbers stored in R1 and R2. The register containing the smaller number is cleared. If two numbers are equal both registers are cleared.