

**Stamford University Bangladesh**  
**CSE 219: Digital Logic and Computer Design**  
**Spring 2023, CT 2, Batch: MCA-Mixed**

Marks: 10

Time: 30 minutes

Questions:

1. Represent the following floating-point numbers using IEEE-754 Standard. [5]  
-45.943 and 101.234
2. Draw the following diagrams and write the truth tables. [2+2+1]
  - a. MOD 12 Synchronous Up Counter.
  - b. 5-bit Ring Counter.
  - c. D-Flipflop using NOR gates