# CSE 331L / EEE 332L: Microprocessor Interfacing & Embedded System

Section: 6, Summer 2021

Quiz - 03

Marks: 10

Time: 25 mins

| **ID:** | |
|---------|---|

Q1: Write necessary instructions to read two decimal numbers a and b **(0 ≤ a , b ≤ 50)** and take the inputs, and compute **$a^2$ - b.**                                  (6)

Ans:
Call scan_num ; input a
Mov ax, cx
Printn
Call scan_num ; input b
Printn

Mul al ; $a^2$
Sub ax, cx ; $a^2$ - b

Q2: Suppose DL contains 0CDh. What will be the content of DL in binary after the following instructions are executed:                                  (4)

SAR DL, CL    ;*if CL contains 2*
SHR DL, 1

Ans:
DL: 1100 1101
After 1st instruction, DL: 1111 0011
After 2nd instruction, DL: 0111 1001