

**COAL**  
**BS CS Fall 2022**  
**Quiz 6**

**Time allowed: 10 min**

**Total marks: 20**

**Roll Number:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Q#1:** [10]

Suppose:

**AX= 0100h , BX=0000h , CX= FFFFh , DX=0000h**

What will the new values of register after the execution of these instruction?

| Instruction | AX   | BX   | CX   | DX   | Carry Flag |
|-------------|------|------|------|------|------------|
| MUL CX      | FF00 | 0000 | FFFF | 00FF | 1          |
| IMUL CX     | FF00 | 0000 | FFFF | FFFF | 0          |

**Q#2:** [10]

Suppose:

**AX= 0005h, BX=FFFFh , CX=0000h , DX=0000h**

What will the new values of register after the execution of this instruction?

| Instruction | AX   | BX   | CX   | DX   | Carry Flag |
|-------------|------|------|------|------|------------|
| DIV BX      | 0000 | FFFF | 0000 | 0005 | No effect  |
| IDIV BX     | FFFB | FFFF | 0000 | 0000 | No effect  |