Time allowed: 10 min   **Total marks: 20**

Roll Number: _____   **Name: _____**

Q1:   **[5+5+5]**
For the following instructions, Give the destination contents and the new settings of Carry, Overflow, Sign and Zero Flags. (Suppose that initially all flags are reset)

a)   ADD   AX, BX
              where AX =5132   BX =9000

AX	carry	overflow	Sign	zero
E132	**0**	**0**	**1**	**0**

b)   SUB   CX, DX
              where CX = A2F5   DX =734A

CX	carry	overflow	sign	Zero
2FAB	**0**	**1**	**0**	**0**

c)   MOV AX, DX
              where AX =1234   DX =F2CD

AX	carry	overflow	sign	Zero
F2CD	**0**	**0**	**0**	**0**

Q2:
How many times the loop will be executed in the following code?   **[2.5]**

```
        Mov ch,FCh
aa:     Mov dl,'A'
        Mov ah,02
        inc ch
        Jnz aa
```

4 Times

Q3:
How many times the loop will be executed in the following code?   **[2.5]**

```
        Mov cx,0
aa:     Mov dl,'A'
        Mov ah,02
        Dec cx
        Jnz aa
```

FFFF+1 Times