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**Computer Organization & Assembly Language**

**LAB 03**

Name:\_\_\_\_\_\_\_\_\_\_\_ Roll NO:\_\_\_\_\_\_\_\_\_\_\_

**Note: Perform each Question on AFD Debugger and paste screen shot in the word file. rename word file with your name**

1. What will be the value in AX after the following lines execute?  
   mov ax,1002  
   inc ax
2. What will be the value in AX after the following lines execute?  
   mov ax,3002  
   dec ax
3. What will be the value in AX after the following lines execute?  
   mov ax,1FFF  
   neg ax
4. What will be the value of the Parity flag after the following lines execute?  
   mov al,1  
   add al,3
5. What will be the value of AX and the Sign flag after the following lines execute?  
   mov ax,5  
   sub ax,6
6. In the following code, the value in AL is intended to be a signed byte. Explain how the  
   Overflow flag helps, or does not help you, to determine whether the final value in AL falls  
   within a valid signed range.  
   mov al,-1  
   add al,130
7. What will be the value of BX after the following instructions execute?

mov bx,0FFFF

and bx,6B

1. What will be the value of BX after the following instructions execute?

mov bx,91BA

and bx,92

1. What will be the value of BX after the following instructions execute?

mov bx,0649B

or bx,3A

1. What will be the value of BX after the following instructions execute?

mov bx,029D6

xor bx,8181

1. What will be the value of BX after the following instructions execute?

mov bx,0AFAF

or bx,3A21

1. What will be the value of DX after the following instructions execute?

mov dx,649B

xor dx,0FFFF

1. In the following instruction sequence, show the resulting value of AL where indicated, in

hexadecimal:

mov al,7A

not al ; a.

mov al,3D

and al,74 ; b.

mov al,9B

or al,35 ; c.

mov al,72

xor al,0DC ; d.

**Best of luck**