

**Name:**

**Id#**

**COE 205, Term 993**

**Computer Organization & Assembly Programming  
Quiz# 3**

Date: Tuesday, July 11

**Q1.** Write an 8086 assembly program to compute the following function, assuming that all the variables are byte variables.

$$Y = (A \text{ XOR } B) C + (A \text{ XNOR } B)$$

Determine what the output of the function will be assuming that the variables have the following content: A=F7h, B=AAh, C=73h.

**Q2.** Suppose that register AX=F1C7h, CX=F751h and the carry flag is 0. Determine the content of register AX and the carry flag after executing the following instruction:

ROR AX, CL

**Q3.** Write an 8086 assembly program to multiply the signed content of register AL by 19 based on shift instructions using the smallest number of instructions possible.

**Q4.** Suppose that you have a table defined in the data segment as *Table db 30 dup(?)*. Write an 8086 assembly program to reverse the content of the table, i.e., the last element becomes the first and the first becomes the last, and so on.