

Name:

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COE 205, Term 992

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

Date: Saturday, Apr. 1

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.