Name: **Id#**

COE 205, Term 033

Computer Organization & Assembly Programming

Quiz# 1

Date: Saturday, July 3, 2004

Q1. Suppose that the Instruction Pointer (IP) content is 0005 and that the instruction stored starting at that address is MOV AX, 5, which has a corresponding machine code B80005. Determine the content of the Instruction Pointer (IP) and the Instruction Register (IR) after fetching this instruction.

IP =

IR=

Q2. Suppose that the CPU is to execute the instruction MOV AX, I, such that variable I is stored in the address 0531 in memory and that the content of this address is FE. Determine the content of the Memory Address Register (MAR) and Memory Data Register (MDR) after the execution of this instruction.

MAR=

MDR=

Q3. Determine the maximum number of bytes that can be transferred in a Read/Write cycle for each of the 8086 and Pentium processors, respectively.

8086=

Pentium=

Q4. Specify the Instruction Set Architecture of the 8086 processor.