Name: **Id#**

COE 205, Term 022

Computer Organization & Assembly Programming

Quiz# 1

Date: Sunday, Mar. 9, 2003

Q1. Explain the function of each of the following:

i. Instruction Pointer (IP).

ii. Instruction Register (IR).

iii. Assembler.

iv. Memory Address Register (MAR).

Q2. Describe what is meant by the Instruction Set Architecture (ISA) of a computer.

Q3. Which of the following 8086 registers is part of the ISA: **Instruction Pointer (IP), Instruction Register (IR), Memory Address Register (MAR), AX, SP**.

Q4. Determine the machine type and the size of the address bus and the data bus for the 8086 and the Pentium processors.

Q5. Determine whether the following operations are performed in the fetch or execute phase: **Reading an instruction from Memory, Reading Operands from Memory, Decoding an Instruction, Incrementing the Instruction Pointer.**

Q6. Order the following storage devices in terms of speed: RAM, Registers, Tape, Cache.