Name: Id#

## COE 205, Term 082 Computer Organization & Assembly Programming Ouiz# 3

Computer Organization & Assembly Programming
Quiz# 3
Date: Monday, April 6, 2009
Q1. Determine three main differences between RISC and CISC processors and given an example
processor of each type.
<b>Q2.</b> List the main general purpose and segment registers in the IA-32 processors.
Q3. Briefly explain the fetch-execute cycle.

<b>Q4.</b> Given a processor with an 11-stage pipeline and clock frequency of 4 GHZ. Determine the time that will be required to execute a program of 1 billion instructions assuming that there will be no pipeline stalls.
<b>Q5.</b> Assume that a program has 4 Kbyte code and 5 Kbyte data. In Real Mode, assume that the first available free segment assigned for the code is segment#1005. Determine the segment that will be allocated to the data.
$\bf Q6.$ Explain logical to linear address translation in both real mode and protected mode.