Name: KEY Id#

COE 205, Term 091

Computer Organization & Assembly Programming
Quiz# 6

# **Q1.** Consider the one-bus CPU organization shown below. Assume that the CPU has only three general registers, namely R0, R1, and R2 and it has also a temporary register Temp. Furthermore, assume that the ALU can perform any of the following four functions based on the control signals *f1, f2, f3,* and *f4,* as shown below:

# *f1*: C=A+B; *f2*: C=A-B; *f3*: C=A+1; *f4*: C=A-1;

