

QUIZ #05

CSCI-410 Spring 2013

1. (16pts) Write the VM code for each of the six variants of the test conditional shown. You may assume that all variables exist in the file “example.vm” and are static.

```
if (test)
  c = a
else
  c = b
```

- a) (test) is (a EQ b)
 - b) (test) is (a NE b)
 - c) (test) is (a LT b)
 - d) (test) is (a GE b)
 - e) (test) is (a GT b)
 - f) (test) is (a LE b)
2. (4pts) Write the VM code for the following loop. You may assume that all variables exist in the file “example.vm” and are static.

```
a = -20
b = 10
while (a LE b)
  a = a + b
```