22C:16 Quiz 5 Date: Feb 28th, 2012

1. [5 points] Consider the following function definition.

```
def test(a, b = "15", c = 20):
    d = a + a
    return b + str(c) + str(d)
```

For each of the function calls below, first write down if the function call causes an error or not. If you determine that the the function call does cause an error, write down a 1-sentence explanation as to why this is so. If you determine that the function call does not cause an error, then write down (i) the values that the parameters of test take on and (ii) the value that is returned by the function.

```
(a) test(20, c = 50)
"155040"
```

- (b) test(10) "152020"
- (c) test(str(30), c = 50) "15503030"
- (d) test(d = 40, a = str(40))
 TypeError: test() got an unexpected keyword argument 'd'
- (e) test("hello", "bye")
 "bye20hellohello"

Turn over for Problem 2.

2. [5 points] Consider the following program

```
def foo(x):
    global z
    z = 22
    y = 15
    return x + y - z

x = 10
y = 15
z = 11
y = foo(z - x)
print x + y - z
```

- (a) What is the output of this program when it is executed. $-18\,$
- (b) Now delete the global z statement from the function foo. What is the output of this modified program when it is executed?-7