

CPSC 231: Fall 2011 midterm review

Multiple choice questions:

1. What is the output of the following program?

```
x = 8
print ("x:", x)
```

- a. x:
- b. 8
- c. x: 8
- d. "x:", x
- e. print ("x:", x)

2. What is the output of the following program?

```
percent = 70
if (percent <= 100) or (percent >= 90):
    letter = 'A'
if (percent <= 89) or (percent >= 80):
    letter = 'B'
if (percent <= 79) or (percent >= 70):
    letter = 'C'
if (percent <= 69) or (percent >= 60):
    letter = 'D'
if (percent <= 59) or (percent >= 00):
    letter = 'F'
print (letter)
```

- a. A
- b. B
- c. C
- d. D
- e. F

3. The program below is supposed to sum the series of three numbers. What type of error does the program contain?

```
num1 = 1
num2 = 2
num3 = 3
sumSeries = num1 * num2 * num3
```

- a. Syntax
- b. Runtime
- c. Logic
- d. This program contains no errors

4. What is the output of the following program?

```
x = 123
print ("%d%d" %(x%10, x/10))
```

- a. 1
- b. 12
- c. 123
- d. 312
- e. 321

Written questions

1. In the space provided below you are to specify the output of the following program.

```
a = 17
b = 13
```

```
def f1 (a, c):
    a = 71
    c = c * 2
    print(a, ' ', b, ' ', c)
    return c
```

```
def f2 (c, a):
    print(a, ' ', b, ' ', c)
    return a,c
```

```
def main ():
    a = 1
    c = 8
    print(a, ' ', b, ' ', c)
    c = f1(a,c)
    print(a, ' ', b, ' ', c)
    a,c = f2(a,c)
    print(a,c)
```

```
main ()
```

<< **Write your answer here** >>

2. Write a program that will determine the cost of checked luggage for airline passengers. Use the following rules:

Weight	Cost
0 up to and including 10 kg	Free

Over 10 kg up to and including 20 kg	\$1.50 per kg over 10 kg
Over 20 kg	\$4 per kg over 10 kg

It will prompt the user to enter the weight and then determine cost. Finally the program should display the original weight and cost. If weight is negative then the program that will display an error message and set the cost to -1.

<< Write your answer here >>

3. In the space provided you are to specify the output of the following program.

```
x = 123  
y = 55.67
```

```
print("x=", x)  
print("%5d %5.2f" %(x,y))  
print("%4.1f%3d" %(y,y))
```

<< Write your answer here >>

4. Circle all the syntax errors contained in the following program.

- I. `print("hello!")`
- II. `print(hello?)`
- III. `a = "foo" + 10`
- IV. `print(x)`