**Homework 3: Lists**

1. Examine the following code:

names = [“Charlotte”, “Uzair”, “Sophie”, “Chris”, “Anandna”]  
print(names[2])

(a) State which name would be printed to the screen [1]

Sophie

(b) Rewrite the second line so that it prints the name “Anandna” [1]

print(names[4])

(c) Which **one** of the following would replace the name “Charlotte” with “Christina”? [1]

⬨ names[1] = “Christina”

⬨ names[“Charlotte”] = “Christina”

⬧ names[0] = “Christina”

⬨ names = “Christina”

(d) Which **one** of the following would successfully add the name “Dave” to the list? [1]

⬨ names[5] = “Dave”

⬨ names[6] = “Dave”

⬨ names = names + “Dave”

⬧ names.append(“Dave”)

2. Examine the following code:

sports = “football”, “cricket”, “hockey”, “netball”, “rugby”]  
for counter in range(4):  
 print(sports[id])

There are three errors in the code (one on each line).

Rewrite the program, correcting all 3 errors. [3]

sports = **[**“football”, “cricket”, “hockey”, “netball”, “rugby”]  
for counter in range(**5**):  
 print(sports[**counter**])

**Line 1:** Missing open square bracket

**Line 2:** Should repeat 5 times

**Line 3:** counter variable should be used as the index

3. Examine the following code:

scores = [23,72,46,84,57,39]

total = 0

Complete the program by using a loop to step through each item and add it to the total. The total should be printed to the screen at the end of the loop. [5]

for counter in range(6):

total = total + scores[counter]

print(total)

**One** mark for correctly formed for loop

**One** mark for repeating 6 times

**One** mark for correctly using scores[counter]

**One** mark for correctly adding scores[counter] to total

**One** mark for correctly printing the total outside the loop

[Total 12 marks]