**Scripting**

Example Theory Test Questions

*There may be more than one way to answer some**questions; any answers with correct logic are acceptable.*

*Error checking is not required in code examples unless requested in the question.*

**Q1 2 marks**

Why would you use *if \_\_name\_\_ == "\_\_main\_\_":*  in Python ?

**Q2 2 marks**

What is the **syntax** error in this code

*if count < 10:*

*count = count +1*

*else if count == 10:*

*count =0*

**Q3 2 marks**

What is the **syntax** error in this code

*if age > 10 && age < 21:*

*ordinal = “th”*

*else:*

*ordinal = “st”*

**Q4 4 marks**

Fill in the missing parts in this code

def writeFile(line):

file = open(myFile.txt', 'a')

**1**.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

file.close()

def readFile():

file = open(myFile.txt', 'r')

lines = **2.**\_\_\_\_\_\_\_\_\_\_\_\_\_

file.close()

**Q5 6 marks**

Which are not string functions in python? Explain what the real functions do?

1. str.splice()
2. str.find()
3. str.split()
4. str.upper()
5. str.parseInt()
6. str.join()
7. str.isdigit()
8. str.indexOf()

**Q6 6 marks**

**1.** Which sqLite command would you use to add a new Table called myTable with column col1.

1. cursor. execute(‘’’Add myTable(col1 TEXT) ‘’’);
2. cursor.commit(‘’’Add table myTable(col1 STRING) ‘’’);
3. cursor.execute(‘’’Create table myTable(col1 TEXT) ‘’’);
4. cursor.create(‘’’Add myTable(col1 STRING) ‘’’);
5. cursor.create(‘’’Add table myTable(col1 TEXT) ‘’’);
6. cursor.commit(‘’’Create myTable(col1 TEXT) ‘’’);

**2.** What query would you add to the command to insure there isn’t already a table called myTable before you create a new one

**Q7 8 marks**

Python is a high level Interpreted language. Explain what that means.

**Q8 8 marks**

Write a class called calculator, add a function called multiplication that takes two values as arguments and prints to screen the product of the two values.

**Q9 8 marks**

Write a for loop that has 10 iterations and prompts the user to input a new word value at each iteration, output a single string containing all given words after each input.

**Q10 8 marks**

Write a while loop that continues to prompt the user to input an integer value until the user enters q to quit, output the sum of all the integers after they quit

**Q11 8 marks**

Create a dictionary called student, with a name, student id, and student year. Enter your own details as values, add code to print out all the keys and values in student.

**Q12 10 marks**

Explain Webscraping

**Q13 12 marks**

Create a dictionary called person with a name, age and city

Create a list called people

Add a new person Bob Smith 21 Dublin to people

Add another person Tom Jones 53 London to people

Using a loop print out a message for each person in people

“<name> lives in <city> and is <age> years old!”

**Q14 16 marks**

Explain in detail what this code is doing line-by-line. Including the purpose of any external libraries

1. import requests

2. import pygal

3. chart = pygal.HorizontalBar(width =200, height =300)

4. data = requests.get("https://pokeapi.co/api/v2/type/1")

5. parsed\_data = data.json()

6. name = parsed\_data[‘result’]['name']

7. chart.add(name, len(parsed\_data['pokemon'])

8. chart.render\_to\_file('chart.svg')