1. What exactly is []?

Ans: It is an empty list.

2. In a list of values stored in a variable called spam, how would you assign the value ‘hello’ as the

third value? (Assume [2, 4, 6, 8, 10] are in spam.)

Ans: spam[2] = ‘hello’

Let’s pretend the spam includes the list [‘a’, ‘b’, ‘c’, ‘d’] for the next three queries.

3. What is the value of spam[int(int(‘3’ \* 2) / 11)]?

Ans: ‘d’

4. What is the value of spam[-1]?

Ans: ‘d’

5. What is the value of spam[:2]?

Ans: [‘a’, ‘b’]

Let’s pretend bacon has the list [3.14, ‘cat’, 11, ‘cat’, True] for the next three questions.

6. What is the value of bacon.index(‘cat’)?

Ans: 1

7. How does bacon.append(99) change the look of the list value in bacon?

Ans: bacon.append(99) adds 99 at the end of the list and the list looks like below:

[3.14, ’cat’, 11, ’cat’, True,99]

8. How does bacon.remove(‘cat’) change the look of the list in bacon?

Ans: bacon.remove(‘cat’) will remove the 1st occurrence of the ‘cat’ in the list and the list will look like below:

[3.14, 11, ‘cat’, True]

9. What are the list concatenation and list replication operators?

Ans: Operator for list concatenation is ‘+’ and for replication is ‘\*’.

10. What is difference between the list methods append() and insert()?

Ans: Append will add an item at the end of the list where as insert will add an item at the index specified within the method.

e.g. bacon.append(23)

[3.14, ‘cat’, 11, ‘cat’, True, 23]

bacon.insert(2, 23)

[3.14, ‘cat’, 23, 11, ‘cat’, True]

11. What are the two methods for removing items from a list?

Ans: name\_of\_list.pop() will remove the last item within the list.

name\_of\_list.remove(Item\_to\_be\_removed) will remove the specified item from the list.

12. Describe how list values and string values are identical.

Ans: list and string values can be used in slicing, len() method can be used to find the length of them, they can be passed under ‘in’ and ‘not in’ operators, they can be concatenated and replicated and used in ‘for’ loops.

13. What’s the difference between tuples and lists?

Ans: Tuples are immutable but list are mutable. A value can be added, removed or changed from the list but not from tuples. Lists are identified by [ ] and tuples by ( ).

14. How do you type a tuple value that only contains the integer 42?

Ans: tup = (42,)

15. How do you get a list value’s tuple form? How do you get a tuple value’s list form?

Ans: list(tuple name) to get list values from tuples and tuple(list name) to get tuple values from list.

16. Variables that “contain” list values are not necessarily lists themselves. Instead, what do they

contain?

Ans: reference of the list values.

17. How do you distinguish between copy.copy() and copy.deepcopy()?

Ans: copy.copy() will do a shallow copy of the list while copy.deepcopy() will will duplicate any list.