1. What exactly is []? – [] means 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.insert(3,'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)]? – 'd'

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

5. What is the value of spam[:2]? -- ['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')? -- 1

7. How does bacon.append(99) change the look of the list value in bacon? -- [3.14, 'cat' ,11, 'cat', True,99]

8. How does bacon.remove('cat') change the look of the list in bacon? [3.14,11, 'cat', True,99]

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

Ans: The list concatenation operator is ‘+’

List replication operator is ‘\*’

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

append() method appends the element or list of element.

insert() method inserts the element at a given index position in a list.

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

.remove() method – to remove the first repetition of element in a list.

.pop() method – this method takes index and remove it from the list and returns that element.

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

Ans: Both are sequences. Lists are mutable whereas string values are immutable.

Elements of list can be of different type but a string only contain characters that are all of string types.

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

Ans: Lists are mutable but tuples are immutable

List is represented by square bracket[], tuple is represented by round brackets()

List iteration is slower and time-consuming whereas tuple is faster.

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

Ans: The trailing comma is important . (42,)

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

Ans: list value's tuple form – by using tuple()

tuple value's list form – by using list()

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

Ans: They contain references to list values.

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

Ans: copy.copy() function will do a shallow copy of a list,

copy.deepcopy() function will do a deep copy of a list. i.e, only copy.deepcopy() will duplicate any lists inside the list.