1. What exactly is []?

Ans - it used to define a 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 – spam[int(int(‘33’)/11)]

spam[int(3.0)]

spam[3] value is ‘d’

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

Ans - value is ‘d’

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

Ans value is ‘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 - index value is 1 .

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

Ans - [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') function removes the first instance of 'cat' in the list, leaving the other elements .

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

Ans - concatenation operator is (+)

Replication operator is (\*)

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

Ans - append() adds an item to the end of a list,  insert() inserts and item in a specified position in the list.

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

Ans – remove() ,pop(),clear().

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

Ans – list is mutable and string is immutable

List contains any type of data and string contains Characters .

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

Ans – tuples are immutable

List is mutable

Tuple are unchangeable

List Can be change

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

Ans - (42,)

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

Ans -- By the square brackets.

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

Ans - by passing references.

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

Ans - A shallow copy creates a new compound object and then adds a reference to the object found in the original. A deep copy creates a new compound object and then adds a reference to the object found in the original. We can copy arbitrary objects (including custom classes) with the copy module.