1) What exactly is []?

Answer- This is the empty list value, which is a list value that contains no items. In Python, a list is created by   placing   elements inside square brackets [] , separated by commas.

    list of integers my_list = [1, 2, 3]

    A list can have any number of items and they may be of different types (integer, float, string, etc.).

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.)

Answer- spam=[2, 4, 6, 8, 10]
    spam[2] = 'hello'

Let's pretend 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)]?

Answer- spam[int(int('3'* 2) / 11)]='d'

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

Answer- 'd'

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

Answer- ['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')?

Answer- 1

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

Answer- [3.14, 'cat', 11, 'cat', True, 99]

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

Answer- [3.14, 11, 'cat', True]

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

Answer- The operator for list concatenation is +, while the operator for replication is *.

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

Answer- append() can add values only to the end of a list.
    insert() can add them anywhere in the list.

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

Answer- The del statement and the remove() list method are two ways to remove values from a list.

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

Answer- Both lists and strings have indexes and slices,
    Both lists and strings can be passed to len(),
    Both lists and strings be used in for loops,
    Both lists and strings can be concatenated or replicated,
    Both lists and strings can be used with the in and not in operators.

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

Answer- Lists are mutable; they can have values added, removed, or changed.
    Tuples are immutable; they cannot be changed at all.

    Tuples are written using parentheses ( )
    Lists use the square brackets [ ].

    List occupies more space of memory than tuple.

    List takes more time to execute as compared to tuple.

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

Answer- (42,)

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

Answer- The tuple() and list() functions, respectively

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

Answer- They contain references to list values.

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

Answer- The copy.copy() function will do a shallow copy of a list, while the copy.deepcopy() function will do a deep copy of a list. That is, only copy.deepcopy() will duplicate any lists inside the list.