1. What exactly is []?  
It’s 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.)  
There are two ways -  
if it’s allowed to overwrite 6 with ‘hello’, then we can do spam[2] = ‘hello’  
Else, we can use insert method of list - spam.insert(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)]?  
output - ‘d’

4. What is the value of spam[-1]?  
output -‘d’

5. What is the value of spam[:2]?  
output - [‘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')?  
it will return the index of the first occurrence of ‘cat’.  
output - 1

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

8. How does bacon.remove('cat') change the look of the list in bacon?  
It will remove first occurrence of ‘cat’, and post this it will look like - [3.14, 11, 'cat', True, 99]

9. What are the list concatenation and list replication operators?  
We can use + or extend operator to concatenate the lists. \* operator can be use for list replication.

10. What is difference between the list methods append() and insert()?  
append() method is used to add an element in the list at the end. However, insert() method takes two arguments - index and element, and it will insert the element at the given index position.

11. What are the two methods for removing items from a list?  
remove() and del() methods can be used to remove items from a list.

12. Describe how list values and string values are identical.  
Both are iterable. Using the index value, a character of string or item of list can be fetched.

13. What's the difference between tuples and lists?  
The tuples are immutable, however, list are immutable.

14. How do you type a tuple value that only contains the integer 42?  
If we want to define tuple with only one item then comma must be used post the element.  
example - sample = (42,)  
or   
sample = tuple((42,))

15. How do you get a list value's tuple form? How do you get a tuple value's list form?  
We can use type casting for this purpose. Examples are below -  
the\_list = [‘a’, ‘b’]  
tuple\_from\_list = tuple(the\_list)  
  
the\_tuple = (‘a’, ‘b’)  
list\_from\_tuple = list(the\_tuple)

16. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?  
The list valuables contains the reference to list values instead of the actual list values themselves.

17. How do you distinguish between copy.copy() and copy.deepcopy()?  
copy.copy() method is used to copy the list and dictionary variables. copy.deepcopy() method is used to copy the list or dictionary which contains list or dictionary as its element inside.