1. What exactly is []?  
it is used to declare a blank 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.)  
spam=[2,4,6,8,10]  
spam[3]=’hello’  
spam  
o/p- [2,4,’hello’,8,10]

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]?  
‘c’

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?  
List Concatenation is used to add two list and list replication operators is used for repetition of list.

10. What is difference between the list methods append() and insert()?  
append() is used to add the elemnet at the end while insert() is used to add element at a particular index.

11. What are the two methods for removing items from a list?  
pop(), remove()

12. Describe how list values and string values are identical.  
when we store char values in list in that case list values and string values will be identical.

13. What's the difference between tuples and lists?  
In tuples we used to store the elements in () while in list we store the elements in []. Tuples are faster than the list because of static in nature. Tuples are immutable in nature while list are mutuable in nature.

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

15. How do you get a list value's tuple form? How do you get a tuple value's list form?  
l=[1,2,3,4,5]  
t=tuple(l) 🡨-- list value’s in tuple form  
l=list(t) 🡨 tuple value’s in list form

16. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?  
variables will contain references to list values rather than list values themselves.

17. How do you distinguish between copy.copy() and copy.deepcopy()?  
copy.copy() 🡪A shallow copy constructs a new compound object and then (to the extent possible) inserts references into it to the objects found in the original.

Copy.deepcopy() 🡪A deep copy constructs a new compound object and then, recursively, inserts copies into it of the objects found in the original.