1. What exactly is []?

Ans – [] this defines a list. It is one of the collection data types available in python. These are un-orders and are mutable. Also data stored in a list can be of any type which means that lists are heterogeneous.

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 - to assign ‘hello’ as the third value in spam list, spam[2] = ‘hello’.

3. What is the value of spam[int(int(‘3’ \* 2) / 11)]?

And ‘d’

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

And ‘d’

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

And ‘a’, ‘b’

bacon = [3.14,'cat', 11, 'cat', True]

6. What is the value of bacon.index(‘cat’)?

Ans – 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 - [3.14, 11, 'cat', True,99]

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

Ans list concatenation will merge 2 or more lists. We can do this by + operator for eg: list1+list2

Where as replication will repeat the elements of a given list in a number of times specified by the user. For eg list1\*3.

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

Ans- both the function will add the elements in a given list but append method will add the element at the end of the list whereas the insert method will add the element in list at the specified position given by the user.

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

Ans – POP(), REMOVE() are the 2 methods which are used to remove the elements from a list.

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

Ans - The similarity between Lists and Strings in Python is that both are sequences.

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

Ans - both can store heterogeneous data and both are unorders but the major difference between lists and tuples is that lists are mutable i.e. we can change the values which are present in a list but tuples are non mutable, i.e. we cannot change the values in tuples.

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

Ans – a= (42,)

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

Ans - a = [1,2,3] convert in tuple

b = tuple(a)

converting to a list

a = list(b)

16. Variables that contains 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() create reference to original object. If you change copied object - you change the original object. . deepcopy() creates new object and does real copying of original object to new one.