



Class: XI	SUB: COMPUTER SCIENCE	Date of Completion:
Worksheet	TOPIC: Lists in Python	07-10-2023

Section A

Fill in the blanks:

1. List in Python is classified as _____ data type.
2. A list consists of elements of _____ type.
3. Lists are indexed by an _____ data type.
4. Elements of a list are enclosed in _____ brackets.
5. Lists are _____, you can update or edit the list.
6. _____ method is used to delete elements from a list if index is not known.
7. _____ method is used to delete elements from a list if index is known.
8. The _____ method adds a single item to the existing list at the end.
9. You can compare two lists by using _____ operators.
10. The _____ operator replicates a list.
11. The _____ function returns the deleted element of the list.
12. The _____ function arranges of a list in an ascending or descending order.

Section B

Answer the following:

1. What is a list?
2. What are the differences between lists and strings?
3. What is the difference between append() and extend()?
4. What is the difference between pop() and remove()?
5. Write the most appropriate list method to perform the following tasks:
 - (a) Delete a given element from the list
 - (b) Get the position of an item in the list
 - (c) Delete the 3rd element from the list.
 - (d) Add single element at the end of the list.
 - (e) Add an element in the beginning of the list.
 - (f) Add elements at the end of the list.

Section C

Find the output of the following code:

```
(a)
List1 = [5, 10, 15, 20, 25, 50, 20]
K = List1.index(20)
List1[ k ] = 250
print(List1)
(b) Str1= "Book"
print(list(Str1))
```

(c)
L = [2, 4, 5, 6, 2, 3, 4, 4, 7]
Count = L.count(4)
print(Count)

(d)
L2 = [10, 45, 2, 20, 30, 40]
L2.sort()
print(L2)
L2.reverse()
print(L2)

(e)
L3 = [100,200,300,400,500]
L3.clear()
print(L3)

(f)
L1 = [500, 600]
L2 = [150, 275, 400]
print(L1 + L2)
L1.append([700,750])
L1.append(800)
print(len(L1))
print(L1)
print(L1.index(800))
print(L1.index(750))

(g)
L3 = [35, 45]
print(L3 * 3)
L3.extend([50,75,80])
print(len(L3))
print(L3)

(h)
List1 = [20, 40, 30, 50, 60, 40, 50, 30, 10, 20, 60, 30]
print(List1.pop(1))
print(List1.pop())
print(List1.remove(50))
print(List1.count(30) * List1.count(60))

Section D

1. Write a program to find minimum and maximum element from a list of elements along with its index in the list.
2. Write a program to calculate mean of a given list of numbers.
3. Write program to search for an element in a given list of numbers.
4. Write a program to count frequency of a given element in a list of numbers.
5. Write a program to count the no. of even elements in a list of numbers.