



**CLASS - VIII COMPUTER SCIENCE NOTES OCTOBER
CHAPTER 7 - Lists, Strings and Functions in Python**

A. Tick the correct option.

1. Items in a list with five elements will have an index from _____
(a) 1 to 4 (b) 0 to 4 (c) 0 to 5
2. The method used to remove an item from a list is _____
(a) pop() (b) remove() (c) Both (a) and (b)
3. Which of the following method is used to add an item to a list?
(a) Insert (b) Append (c) Both (a) and (b)
4. Which of the following is not a string function?
(a) Lower (b) Upper (c) Del

B. Fill in the blanks:-

1. A List is a data type similar to an array.
2. A function can accept Input data also.
3. In Python, statements in the function are written with Indentation.
4. The Dot(.) operator is used to execute a particular method for a string.

C. Write 'T' for true and 'F' for false for the following statements.

1. A list can hold only one type of data. - F
2. You cannot change the values of a list. - F
3. Built-in functions are already created in the python library. - T
4. You can also define a function according to your requirements. - T

D . Short answer questions:-

1. What is the use of list?

A list is a data type in python similar to an array in other programming languages. A list can have any number of items and the items can be of different data types. Each item in a list can be referred to using an index.

2. What is the purpose of using a parameter?

- The names of variables that store the values that are passed to the function as inputs. A function may or may not require parameters.
- A function can accept input data to work on. These are called parameters.

3. What is the use of functions in a program?

A function is a block of related statements to perform a specific task. First, you need to define a function and save it in the file having .py extension, then you can call it to execute the statement defined in the function.

4. What are built-in functions?

In python, some functions are already available for use. These functions are called built-in function Every programming language contains some built-in functions. There are various types of functions in python.

E. Long answer questions.

1. Explain any five string functions.

String functions are used to manipulate strings. They are generally called methods and are associated with a string.

Given below are some useful built-in string methods in python.

<u>Name of Method</u>	<u>Task</u>
Str()	It converts the specified value into a string.
Capitalize()	It capitalizes the first letter of a string.
Lower()	It converts a string to a lowercase.
Upper()	It converts a string to upper case.
Count()	It returns the number of times a specified value occurs in a string.
Strip()	It removes any spaces at the beginning and at the end of characters in a string.

2. Explain functions for the following:

- **Deleting a list :** The del keywords deletes the list. For example, the second print(name) command in the following program results in a name error, since the list has been deleted using the del command.

Example:

```
Name=["Rhea","saira","roohi",nilesh"]
print(Name)
del Name
print(Name)
```

Output:

```
["Rhea","saira","roohi","nilesh"]
Traceback(most recent call last):
File"<pyshe#11>',line 1, in <module>
Print(Name)
>>> Name Error:name 'Name' is not defined
```

- **Inserting an item in a list :** The insert() method inserts an element at a given index in the list. While using this function, you need to specify the index or position where the element needs to be inserted along with the element to be inserted in the list.

Example:

```
Name=["Rhea","saira","roohi",nilesh"]
print(Name)
n=input("Enter Name")
Name.insert(2,n)
print(Name)
```

Output:

```
["Rhea","saira","roohi","nilesh"]
Enter Name Gori
>>> ["Rhea","saira","gori","roohi","nilesh"]
```

- **Clear the list:** The clear() method clears the list.

Example:

```
Name=["Rhea","saira","roohi",nilesh"]
print(Name)
Name.clear()
print(Name)
```

Output:

```
["Rhea","saira","roohi","nilesh"]
>>> []
```

3 . What is the significance of returning data in functions? Explain with an example.

A function can also return data. The return statement is used to exit from a function and go back to the point from where it was called.

Example:

A program to check whether the number is even or odd using functions.

```
#a function that accepts parameters and also returns a value
Def is_even(num)
    if num%2==0:
        return True
    Else:
        return False
# a program that calls the above function
number =int(input("Enter an integer:"))
if is_even(number)
    print(number, "is even")
else:
    print(number,"is odd")
```

Output:

```
Enter an integer :27
>>> 27 is odd
```