

STD: XII

AUGUST MONTHLY TEST

Lessons: 8 to 10

Marks: 50 / Time: 1.30 Hrs.

COMPUTER SCIENCE

PART- I

I. Choose the correct answers.

10 X 1 = 10

1. What will be the output of the following code?

```
str1 = "Chennai Schools"
```

```
str1[7] = "-"
```

a) Chennai-Schools

b) Chenna-School

c) Type error

d) Chennai

2. Which of the following is used as placeholders or replacement fields which get replaced along with format( ) function?

a) { }

b) &lt; &gt;

c) ++

d) ^^

3. Versatile function is \_\_\_\_\_.

a) Format( )

b) in and not in

c) Lambda

d) User defined

4. Which of the following function is used to count the number of elements in a list?

a) count( )

b) find( )

c) len( )

d) index( )

5. What will be the result of the following Python code?

```
S=[x**2 for x in range(5)]
```

```
print(S)
```

a) [0,1,2,4,5]

b) [0,1,4,9,16]

c) [0,1,4,9,16,25]

d) [1,4,9,16,25]

6. Which loop is suitable to access the elements one by one?

a) For

b) While

c) Do...While

d) Foreach

7. \_\_\_\_\_ is a mixed collection of elements.

a) Set

b) Dictionary

c) Tuple

d) List

8. A private class variable is prefixed with

a) \_\_

b) &amp;&amp;

c) ##

d) \*\*

9. Which of the following is the private class variable?

a) \_\_num

b) ##num

c) \$\$num

d) &amp;&amp;num

10. Which function will execute automatically when an object of a class is created?

a) Constructor

b) Destructor

c) Selector

d) init function

**PART- II****II. Answer any five questions. Question No. 17 is compulsory:****5 X 2 = 10**

11. Do you modify a string in Python?

12. Write the Output for the following code:

```
str1 = input ("Enter a string: ")
index=0
for i in str1:
print ("Subscript[" ,index, "]: ", i)
index += 1
```

13. How will you access the list elements in reverse order?

14. What is the use of pop()?

15. What is the Output after updating the elements in a list?

```
MyList = [2, 4, 5, 8, 10]
print ("MyList elements before update... ")
for x in MyList:
print (x)
MyList[2] = 6
print ("MyList elements after updation... ")
for y in MyList:
print (y)
```

16. What is instantiation?

17. How will you define a Class? Write the syntax for class.

**PART- III****III. Answer any five questions. Question No. 24 is compulsory:****5 X 3 = 15**

18. Write a Python program to display the given pattern

```
COMPUTER
COMPUTE
COMPUT
COMPU
COMP
```

C O M

C O

C

19. Write general format of replace function:  
20. What will be the output of the following code?

```
list = [2**x for x in range(5)]  
print(list)
```

21. Write the Output for the following code:

```
squares = [ ]  
for x in range(1,11):  
s = x ** 2  
squares.append(s)  
print (squares)
```

22. What are the ways to deleting an elements in a list?

23. What is the output of the following program?

```
class Greeting:  
def __init__(self, name):  
    self.__name = name  
def display(self):  
    print("Good Morning ", self.__name)  
obj=Greeting('Bindu Madhavan')  
obj.display()
```

24. How class members can be accessed?

#### PART- IV

#### IV. Answer all the questions.

3 X 5 = 15

25. a) Explain about string operators in python with suitable example.

(OR)

- b) What the different ways to insert an element in a list. Explain with suitable example.

26. a) Explain the different set operations supported by python with suitable example.

(OR)

b) Write the Output for the following code:

```
a=-1
b=1
n=int(input("Enter no. of terms: "))
i=0
sum=0
Fibo=[]
while i<n:
    s = a + b
    Fibo.append(s)
    sum+=s
    a = b
    b = s
    i+=1
print("Fibonacci series upto "+ str(n) + " terms is : " + str(Fibo))
print("The sum of Fibonacci series: ",sum)
```

27. a) Explain about constructor and destructor with suitable example.

**(OR)**

b) Write the Output for the following code:

```
class Student:
    mark1, mark2, mark3 = 45, 91, 71
    def process(self): #class method
        sum = Student.mark1 + Student.mark2 + Student.mark3
        avg = sum/3
        print("Total Marks = ", sum)
        print("Average Marks = ", avg)
        return
S=Student()
S.process()
```