

**SACRED HEART MAT HR SEC SCHOOL, NEYVELI-2.****CLASS : 12 (CHAPTER 1,6,8,9,16)****MARK : 70****SUBJECT : COMPUTER SCIENCE****TIME : 3 HRS****I. CHOOSE THE CORRECT ANSWER:****1 X 15 = 15**

1. The small sections of code that are used to perform a particular task is called \_\_\_\_\_.  
(A) Subroutines (B) Files (C) Pseudo code (D) Modules
2. The condition in the if statement should be in the form of \_\_\_\_\_.  
(A) Arithmetic or Relational expression (B) Arithmetic or Logical expression  
(C) Relational or Logical expression (D) Arithmetic
3. Strings in python is \_\_\_\_\_.  
(A) Changeable (B) Mutable (C) Immutable (D) flexible
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. Which is a python package used for 2D graphics?  
(A) matplotlib.pyplot (B) matplotlib.pip (C) matplotlib.numpy (D) matplotlib.plt
6. Using Matplotlib from within a python script, which method inside the file will display your plot?  
(A) plot() (B) disp () (C) clear () (D) show ()
7. In object oriented programming \_\_\_\_\_ are the interface.  
(A) function (B) classes (C) structures (D) pointer
8. What will be the output of the following python code? For i in range (1,10,2): Print ( i,end = ' ' )  
(A) 1 3 5 7 9 (B) 1 2 4 6 8 (C) 2 4 6 8 10 (D) 1 3 5 7 10
9. The positive and negative index values of 'P' in the string Str1='COMPUTER' are  
(A) 3, -4 (B) 4, -4 (C) 3, -5 (D) 4, -5
10. \_\_\_\_\_ is the membership operator.  
(A) is (B) at (C) to (D) in
11. What is the positive index value of 56 in the list given below? MyList=[45, 85, 36, 56]  
(A) 4 (B) -4 (C) 3 (D) -1
12. Which Function is used to generate a series of values in Python?  
(A) series() (B) range() (C) list() (D) tuple()
13. Which function delete an elements using the index value?  
(A) remove () (B) pop () (C) clear() (D) del statement
14. The function to make a pie chart with Matplotlib is \_\_\_\_\_.  
(A) plt.bar() (B) pie.plt() (C) bar.plt() (D) plt.pie()
15. The name to the x-axis in the plot is given by \_\_\_\_\_.  
(A) x range (B) x point (C) x label (D) x axis

**II. ANSWER THE FOLLOWING Q.NO 24 COMPULSORY (ANY 6)****6 X 2 = 12**

16. List the characteristics of Interface.
17. Write note on range () in loop.
18. How will you delete a string in Python?
19. Write the use of pop () function in Python.
20. List the types of Visualizations in Matplotlib.
21. How will you access the list elements in reverse order?
22. What is slicing?

23. What is Jump statement? Write it types.

24. What will be output of the following snippet? Mydict={chr(x):x for x in range(97,102)} print (Mydict)

**III. ANSWER THE FOLLOWING Q.NO 33 COMPULSORY (ANY 6)**

**6 X 3 = 18**

25. Why strlen is called pure function?

26. Write the syntax of while loop.

27. Write a short about the followings with suitable example. (a) capitalize() (b) swap case()

28. List out the set operations supported by python.

29. Write any three uses of data visualization.

30. Write note on if.. else structure.

31. What is the use of format ()? Give an example.

32. Explain the difference between del and clear() in dictionary with an example.

33. Write a python program to display given pattern

```
C
C O
C O M
C O M P
C O M P U
C O M P U T
C O M P U T E
C O M P U T E R
```

**IV. ANSWER THE FOLLOWING Q.NO 33 COMPULSORY (ANY 6) 6 X 3 = 18**

34. What are called Parameters and write a note on

(i) Parameter without Type (ii) Parameter with Type (OR)

Write a detail note on for loop.

35. Write a program to display multiplication table for a given number. (OR)

Explain about string operators in python with suitable example.

36. What the different ways to insert an element in a list? Explain with suitable example. (OR)

What are the key differences between Histogram and Bar graph?

37. Explain in detail the types of pyplots using Matplotlib. (OR)

Explain the various buttons in a matplotlib window.

38. Write a program to check if a number is positive, Negative or Zero. (OR)

Write the short note on the following built-in string functions.

(i) capitalize() (ii) isalpha() (iii) isalnum() (iv) lower()

**\*\*\*\*\* ALL THE BEST \*\*\*\*\***