

**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 \*\*\*\*\***

**SACRED HEART MAT HR SEC SCHOOL, NEYVELI-2.****CLASS : 12 (CHAPTER 2,3,5,12,15)****MARK : 70****SUBJECT : COMPUTER SCIENCE****TIME : 3 HRS****I. CHOOSE THE CORRECT ANSWER:****1 X 15 = 15**

1. The data structure which is a mutable ordered sequence of elements is called  
(A) Built in (B) List (C) Tuple (D) Derived data
2. Which of the following allow to name the various parts of a multi-item object?  
(A) Tuples (B) Lists (C) Classes (D) quadrat
3. Which of the following function that facilitates the data abstraction?  
(A) Constructors (B) Destructors (C) Selectors (D) a and c
4. Which scope is widest scope?  
(A) local (B) enclosed (C) global (D) built in
5. Containers for mapping names of variables to objects is called \_\_\_\_\_.  
(A) Scope (B) Mapping (C) Binding (D) Namespaces
6. Which members are accessible from outside the class?  
(A) Public (B) Protected (C) Secured (D) Private
7. Which of the following character is used to give comments in python program?  
(A) # (B) & (C) @ (D) \$
8. Expand IDLE \_\_\_\_\_.  
(A) Integrated Design Learning Environment (B) Insert Development Learning Environment  
(C) Integrated Develop Learning Environment (D) Integrated Development Learning Environment
9. \_\_\_\_\_ is the floor division operator in Python.  
(A) / (B) % (C) %% (D) //
10. The clause used to sort data in a database \_\_\_\_\_.  
(A) SORT BY (B) ORDER BY (C) GROUP BY (D) SELECT
11. What symbol is used for SELECT statement?  
(A)  $\sigma$  (B)  $\Pi$  (C) X (D)  $\Omega$
12. The function that returns the largest value of the selected column is \_\_\_\_\_.  
(A) MAX() (B) LARGE() (C) HIGH() (D) MAXIMUM()
13. Which of the following keyword avoid the duplicate?  
(A) Distinct (B) Remove (C) Where (D) Group By
14. Which one of the following methods displays the specified number of records?  
(A) fetchone() (B) fetchmany() (C) fetchall() (D) fetchsome()
15. Which method is used to create a connection with the database file?  
(A) connect() (B) pass() (C) link() (D) create()

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

16. Differentiate constructors and selectors.
17. How Python represents the private and protected Access specifies?
18. Write short notes on Tokens.
19. Which component of SQL lets insert values in tables and which lets to create a table?
20. Write categories of SQL Commands.
21. Mention the users who uses the Database.
22. Write notes on MAX ( ) and MIN ( ).

23. What is a scope?  
24. Write the command to populate record in a table. Give an example.

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

25. What are the different ways to access the elements of a list. Give example.  
26. Define abstraction. What is abstract data types?  
27. Define Global scope with an example.  
28. Write any three characteristics of modules.  
29. Explain Ternary operator with examples.  
30. What are string literals?  
31. What is a constraint? Write short note on Primary key constraint.  
32. Mention the difference between fetch one ( ) and fetch many ( ).  
33. Write a SQL statement to modify the student table structure by adding a new field.

**IV. ANSWER THE FOLLOWING IN DETAIL:****5 X 5 = 25**

34. How will you facilitate data abstraction? Explain it with suitable example. (OR)  
How will you access the multi-item? Explain with example.
35. Write any five benefits in using modular programming. (OR)  
Write Five Characteristics of Modules.
36. Explain input ( ) and print ( ) functions with examples. (OR)  
Discuss in detail about Tokens in Python.
37. Write the different types of constraints and their functions. (OR)  
What are the components of SQL? Write the commands in each.
38. What is the use of HAVING clause? Give an example python script. (OR)  
Write a Python script to create a table called ITEM with following specification. Add one record to the table.
- NAME OF THE DATABASE :- ABC  
NAME OF THE TABLE :- ITEM  
COLUMN NAME AND SPECIFICATION :-  
ICODE :- INTEGER AND ACT AS PRIMARY KEY  
ITEM NAME :- CHARACTER WITH LENGTH 25  
RATE :- INTEGER  
RECORD TO BE ADDED :- 1008, MONITOR, 15000

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