

## COMPUTER SCIENCE

CLASS : XII

MARKS: 70 TIME: 3Hrs

I Choose the correct answer :

15x1 = 15

1. Which of the following is a distinct syntactic block?  
a) Subroutines b) Functions c) Definition d) Modules
2. ADT :  
a) Absolute Data Type b) Abstraction Data Type  
c) Abstract Data Type d) Abbreviated Data Type
3. Which of the following is used in programming languages to map the variable and object?  
a) :: b) := c) = d) ==
4. From the following sorting algorithms which algorithm needs the minimum number of swaps?  
a) Bubble sort b) Quick sort c) Merge sort d) Selection sort
5. The shortcut key to Run a python module?  
a)F2 b) F3 c) F4 d)F5
6. How many important control structures are there in Python?  
a) 3 b) 4 c) 5 d) 6
7. Which of the following keyword is used to exit a function block?  
a) define b) return c) finally d) def
8. The subscript index value of strings starts with  
a) 0 b) 1 c) n d) n-1
9. What is the output?  
for i in range(5,15,3)  
print(i)  
a) 5 4 3 2 1 b) 5 10 15 c) 5 8 11 14 d) 3 4 5
10. Which of the following class declaration is correct?  
a) class class\_name: b) class class\_name<>  
c) class class\_name d) class class\_name[ ]
11. When the first version of SQL was developed?  
a) 1986 b) 1970 c) 1992 d) 2008
12. By Default CSV files should open automatically in  
a) Notepad b) MS Excel c) MS Access d) Python
13. A framework for interfacing Python and C++ is  
a) Ctypes b) SWIG c) Cython d) Boost
14. SQLite falls under which database system?  
a) Flat file database system b) Relational Database system  
c) Hierarchical database system d) Object oriented Database system
15. Which is a python package used for 2D graphics?  
a) matplotlib.pyplot b) matplotlib.pip c) matplotlib.numpy d) matplotlib.plt

**II Answer any SIX of the following questions (Q.No.24 is compulsory) 6x2=12**

16. What is Abstract data type?
17. Differentiate del with remove( ) function of List.
18. What is Mapping?
19. Define Control statement.
20. Write the different types of function.
21. What is data consistency?
22. Mention the default modes of the File
23. Write the expansion of :(i) SWIG (ii) MinGW
24. What is the advantage of declaring a column as "INTEGER PRIMARY KEY"

**III Answer any SIX of the following questions (Q.No.33 is compulsory) 6x3=18**

25. Write Syntax for function definition and explain it.
26. Define Enclosed scope with an example.
27. Write short notes on Escape sequences with examples.
28. Write a python program to find the length of a string.
29. What are class members? How do you define it?
30. Write a SQL statement using DISTINCT keyword.
31. Write a Python program to write a CSV File with custom quotes
32. What is MinGW? What is its use?
33. What will be the output of the following code?

```
list = [3**x for x in range(6)]  
print(list)
```

**IV Answer ALL the questions**

**5x5=25**

34. What are called Parameters and write a note on  
(i) Parameter without Type (ii) Parameter with Type **(OR)**  
Explain about Aggregate functions with example.
35. Explain input() and print() functions with examples. **(OR)**  
What the different ways to delete an element in a list. Explain with suitable example.
36. Explain the scope of variables with an example. **(OR)**  
Write the different types of constraints and their functions.
37. What are the key difference between Histogram and Bar graph. **(OR)**  
Write a program to accept a string and print the number of uppercase, lowercase, vowels, consonents and spaces in the given string.p
38. Write the different methods to read a File in Python. **(OR)**  
Explain the Bubble sort algorithms with example.