



Time: 3.00 Hours

**Standard 12  
COMPUTER SCIENCE**

Marks: 70

**PART –I****I Answer all the questions****15 x 1= 15**

1. The values which are passed to a function definition are called  
a) Arguments    b) Subroutines    c) Function    d) Definition
2. The data type whose representation is known are called  
a) Built in data type    b) Derived data type    c) Concrete data type    d) Abstract data type
3. The process of subdividing a computer program into separate sub-programs is called  
a) Procedural Programming    b) Modular Programming  
c) Even Driven Programming    d) Object Oriented Programming
4. Which of the following is not Logical operator  
a) and    b) or    c) not    d) Assignment
5. Which amongst this is not a jump statement  
a) far    b) pass    c) continue    d) break
6. Which function is called anonymous un-named function  
a) Lambda    b) Recursion    c) Function    d) Define
7. Strings in python  
a) Changeable    b) Mutable    c) Immutable    d) flexible
8. Which of the following set operation includes all the elements that are in two sets but not the one that are common to two sets.  
a) Symmetric difference    b) Difference    c) Intersection    d) Union
9. The process of creating an object is called as .....  
a) Constructor    b) Destructor    c) Initialize    d) Instantiation
10. The command to delete a table including the structure is .....  
a) DROP    b) DELETE    c) DELETE ALL\_    d) ALTER TABLE
11. The expansion of API is  
a) Application programming Interpreter    b) Application programming interface  
c) Application performing interface    d) Application programming interlink
12. The function which retrieves the average of a selected column of rows in a table.  
a) ADD()    b) SUM()    c) AVG()    d) AVERAGE()
13. Which of the following is not a type of visualization under matplotlib?  
a) Histogram    b) pie chart    c) Box plot    d) SQLite
14. Find the odd man out  
a) ER model    b) data model    c) Hierarchical model    d) Relational model
15. .... file cannot store charts or graphs  
a) Excel    b) MS-word    c) CSV    d) Open office calc.

**PART –II****II Answer any 6 questions .Question no.20 is compulsory****6 x 2 =12**

16. Write the phases of performance evaluation of an algorithm
17. Write note on range() in loop
18. What is a literal? Explain the types of literals?
19. How recursive function works?
20. Write a python program to find the length of a string?
21. How will you create a set using list or tuple.

22. What is the difference between SQL and MySQL?
23. What are the uses of CD Command? Example?
24. How will you create constructor in Python

### PART –III

III Answer any 6 questions Question no. 29 is compulsory

6 x 3 =18

25. What is the side effect of impure function? Give example.
26. Differentiate Concrete data type and abstract datatype.
27. Write any three benefits of modular programming
28. Write a short note about sort()
29. Write a program to display the following Floyd's Triangle using 'for' loop

```

1
2 3
4 5 6
7 8 9 10

```

30. Explain Cartesian product with a suitable example.
31. What are class members? How do you define it?
32. What are the components of DBMS?
33. Write short note on SAVEPOINT command in SQL

### PART –IV

IV Answer all the questions

5 x 5 =25

34. What is Binary search? Discuss with example.

(or)

Explain input() and print() functions with examples.

35. Write a python code to find L.C.M. of two numbers

(or)

Explain string operators with suitable examples?

36. What is nested tuple? Explain with an example.

(or)

What are the components of SQL? Write the commands in each.

37. Write the rules to be followed to format the data in a CSV file.

(or)

Write the syntax of getopt() and explain its arguments and return values.

38. Write a python script to create a table called Item with following specification and add any three records to the table. DATABASE NAME : abc TABLE NAME : Item  
column name with specification:

```

icode           : Integer
itemname        : char with length 25
rate            : Integer

```

(or)

What are the differences between Histogram and Bar Graph.