Class : 12

Register Number

REVISION EXAMINATION - 2025

COMPUTER SCIENCE

Time Allowed : 3.00 Hours] **[Max. Marks : 70**

PART - I

Note : i) Answer all the questions. **15X1 = 15**
ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

1. Which of the following defines what an object can do?
   (a) Operating System (b) Compiler (c) Interface (d) Interpreter
2. Which is a comma-separated sequence of values surrounded with parentheses?
   (a) class (b) tuple (c) list (d) selector
3. Which scope refers to variables defined in current function?
   (a) Local Scope (b) Global scope (c) Module scope (d) Function Scope
4. Binary search also called ..... search algorithm.
   (a) Full-interval (b) Half-interval (c) Linear-interval (d) Binary-interval
5. The Python prompt indicates that Interpreter is ready to accept instruction.
   (a) >>> (b) <<< (c) # (d) <<
6. What will be the output of the following python code?

```
for x in range(1,10,2):
        print(x, 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
7. Which of the following keyword is used to begin the function block?
   (a) define (b) for (c) finally (d) def
8. Which of the following is the slicing operator?
   (a) { } (b) [ ] (c) <> (d) ( )
9. Let setA={3,6,9}, setB={1,3,9}. What will be the result of the following snippet?
   print(setA&setB)
   (a) {3,6,9,1,3,9} (b) {3,9} (c) {1} (d) {1,3,6,9}
10. The process of creating an object is called as:
    (a) Constructor (b) Destructor (c) Initialize (d) Instantiation
11. What is the acronym of DBMS?
    (a) DataBase Management Symbol (b) Database Managing System
    (c) DataBase Management System (d) DataBasic Management System
12. The command to delete a table including the structure is
    (a) DROP (b) DELETE (c) DELETE ALL (d) ALTER TABLE
13. A CSV file is also known as a ....
    (a) Flat File (b) 3D File (c) String File (d) Random File
14. The module which allows you to interface with the Windows operating system is
    (a) OS module (b) sys module (c) csv module (d) getopt module
15. The most commonly used statement in SQL is
    (a) cursor (b) select (c) execute (d) commit

PART - II

Note: Answer any six questions. Question number 24 is compulsory. **6x2=12**

16. What are the different operators that can be used in Python?
17. Write the syntax of if..else statement.
18. What are the main advantages of function?
19. What will be the output of the following Python code?

```
str1='CHENNAI SCHOOLS'
print(str1.lower())
print(str1.islower())
```

20. How will you create constructor in Python?
21. What is normalization?

22. Mention the two ways to read a CSV file using Python.
23. What is Data Visualization?
24. Let list=[10, 12, 14, 18, 20], Write the python code to insert the value16 inbetween14 and 18.

PART - III

Note: Answer any six questions. Question number 33 is compulsory. **6×3=18**

25 Explain Ternary operator with examples.
26. Using if..else..elif statement write a suitable program to display largest of 3 numbers.
27. Differentiate ceil( ) and floor( ) function?
28. Write a short note about the followings with suitable example:
(a) capitalize( ) (b) swapcase( )
29. Debug and rewrite the following Python program, to get the given output:

```
Class Hosting{
def init__(self, ):
        self.__name=name
Def display(self)
        print("Welcome to", self.__name)
obj.Hosting("Learn Python")
obj.display
```

Output:
Welcome to Learn Python

30. Write a note on different types of DBMS users
31.

Admno	Name	Age	Gender
101	Velpari	19	M
102	Kabilar	18	M
103	Neelan	17	M
104	Angavai	16	F
105	Sangavai	14	F

For the above given student table, write the query for the followings
(1) To display all the records from the table.
(2) To display Admno, Name and Age of the students whose age between 18 and 19.
(3) To display all the records students in alphabetical order of their names.
32. Mention the difference between fetchone() and fetchmany()

33. Fill in the blank with suitable expression in the given print statement to get the output given below:

```
print({..... for x in range(65,69)})
```

Output:
{65: 'A', 66: 'B', 67: 'C', 68: 'D'}

PART - IV

Note: Answer all questions. **5×5=25**

34. (a) Explain Pure and impure functions with an example. **(OR)**
(b) Write any five benefits in using modular programming.
35. (a) Explain input() and print() functions with examples. **(OR)**
(b) Explain the jump statements in Python with suitable examples.
36. (a) Explain the following built-in functions with suitable examples.
(1) id() (2) chr() (3) round() (4)type() (5) pow() **(OR)**
(b) Write the output for the following Python commands:

```
str1 = "Welcome to Python"
 (i)  print(str1)
(ii)  print(str1[11:17])
(iii) print(str1[11:17:2])
(iv) print(str1[::4])
(v)  print(str1[::-4])
```

37. (a) What is the purpose of range( )? Explain with an example. **(OR)**
(b) Explain the different operators in Relational algebra with suitable examples.
38. (a) Write the different types of constraints and their functions. **(OR)**
(b) Explain the various buttons in a matplotlib window.