Class : 12

Note :i) Answer All the questions.　　　　15X1 = 15

1. Which of the following defines what an object can do?

    (a) Operating system　　(b) Compiler　　　(c) Interface　　　(d) Interpreter

2. A sequence of immutable objects as called -----

    (a) Built in　　　　　(b) List　　　　　(c) Tuple　　　　(d) Derived data

3. Which of the following secuirty technique that regulates who can use resources in a computing environment?

    (a) Pass word　　　(b) Authentication　　(c) Access control　　(d) Certification

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. In Python, ---- prompt indicates interpreter is ready to accept instruction.

    (a) >>　　　　　　(b) >>>　　　　　(c) <<　　　　　(d) <<<

6. Which operator is called conditional operator?

    (a) Ternary　　　　(b) Unary　　　　(c) Binary　　　　(d) Assignment

7. Which plays a vital role in Python programming?

    (a) Statements　　　(b) control　　　(c) Structure　　　(d) Indentation

8. Which of the following keyword is used to exit a function block?

    (a) Define　　　　(b) return　　　　(c) finally　　　　(d) def

9. What is the output of the following instructions

    >>>str=" THIRUKKURAL"

    >>>print(str[6:])

    (a) THIRUK　　　(b) THIRUKK　　　(c) KKURAL　　　(d) KURAL

10. How many data types in PYTHON

    (a) 3　　　　　　(b) 4　　　　　　(c) 2　　　　　　(d) 5

11. Relational data base was first proposed by

    (a) EF Codd　　　(b) EE Codd　　　(c) EF Cadd　　　(d) Ef Codder

12. The expansion of CRLF is

    (a) Control Return and Line Feed .　　　(b) Carriage Return and Form Feed

    (c) Control Router and Line Feed　　　(d) Carriage Return and Line Feed

13. A framework for interfacing python and C++ is

    (a) Ctypes　　　　(b) SWIG　　　　(c) CYTHON　　　(d) BOOST

　　　　　　　　　　　　　　　　　　　　　　　　　(d) SUM ()

    (a) Matplotlib　　　(b) PIP　　　　(c) plt.show( )　　　(d) Python package

Answer any six questions.Q.No. 24 is compulsory.   6x2=12
16. Define functinons.
17. What is a scope?
18. List down the factors for measuring execution time of an algorithm.
19. What are different modes of python programming?
20. What are Recursive functions?
21. What is the use of format ()? Give an example.
22. List the three ways of adding elements to the list?
23. Write the expantion of SWIG. and Min GW.
24. Define Data visualization.

PART - III
Answer any six questions.Q.No.33 is compulsory.   6x3=18
25. What is a pair? Give example.
26. List the hierarchy of LEGB rule.
27. Write about jump statements.
28. What is a string in python?
29. List down some of the RDBMS packages.
30. What are the components of SQL.
31. What is CSV file? How will you read CSV file in python.
32. Write any three uses of Data visualization.
33. What is the purpose of fetchone () and fetchmany() functions.

                                                                                    5x5=25
                                                                        OR
    (b) Define : Algorithm. Write down its characteristics and Asymptotic notation of algorithm.
35. (a) Write a python program to find factorial of n.   .OR
    (b) Define : Loop and Explain the various types of LOOPs in python.
36. (a) Explain the various function used in strings.   OR
    (b) What are lists. Explain the various list functions in python.
37. (a) Write down the features of python over C++.   OR
    (b) What are the buttons in the output screen of Matplot.
38. (a) Read the mark table and answer the following queries using SQL.

Exam No.	Name	M	P	C
12201	Anbu	76	67	56
12202	Babu	56	55	67
12203	Chandar	32	45	54
12204	Elumalai	55	65	57
12205	Mani	45	55	30

    i) To display all the students who has got more than 35 in M.

                                                                        OR