NADAR HR.SEC.SCHOOL, RAJAPALAYAM.
COMPUTER SCIENCE – JUNE - 2023
CLASS : 12

Time Allowed : 3.00 Hours   **Maximum Marks : 70**

PART - I

I . Choose the most appropriate answer from the given four alternatives and   **15 X 1 = 15**
Write the option code and the corresponding answer.

1. The variables in a function definition are called as :
   - (A) Subroutines
   - (B) Function
   - (C) Definition
   - (D) Parameters

2. A sequence of immutable objects is called :
   - (A) Built in
   - (B) List
   - (C) Tuple
   - (D) Derived data

3. Containers for mapping names of variables to object is called
   - (A) Scope
   - (B) Mapping
   - (C) Binding
   - (D) Namespaces

4. The two main factors which decide the efficiency of an algorithm are___
   - (A) Processor and Memory
   - (B) Complexity and capacity
   - (C) Time and Space
   - (D) Data and space

5. The Shortcut key used to create new Python program is :
   - (A) Ctrl+C
   - (B) Ctrl+F
   - (C) Ctrl+B
   - (D) Ctrl+N

6. " elif " can be considered to be the abbreviation of:
   - (A) nested if
   - (B) if..else
   - (C) else if
   - (D) if..elif

7. The function which is called anonymous un-named function :
   - (A) Lambda
   - (B) Recursion
   - (C) Function
   - (D) Build in

8. ___ is used as placeholders or replacement fields which get replaced along with format() function.
   - (A) {}
   - (B) <>
   - (C) ++
   - (D) ^^

9. Pick odd one in connection with collection data type.
   - (A) List
   - (B) Tuple
   - (C) Dictionary
   - (D) Loop

10. The process of creating an object is called as :
    - (A) Constructor
    - (B) Destructor
    - (C) Initialize
    - (D) Instantiation

11. A table is known as
    - (A) Tuple
    - (B) Attribute
    - (C) Relation
    - (D) Entity

12. The clause used to sort data in a database:
    - (A) SORT BY
    - (B) ORDER BY
    - (C) GROUP BY
    - (D) SELECT

13. The Command used to skip a row in a CSV file :
    - (A) next()
    - (B) skip()
    - (C) omit()
    - (D) bounce()

14. The module which allow to interface with the Windows operating system :
    - (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

II . Answer any six questions. Question No. 24 is Compulsory.   **6 X 2 = 12**

16. Differentiate - Interface and Implementation.

17. What is a pair ? Give an example.

18. Write short notes on Tokens.

19. List the control structures in Python.

20. What are the main advantages Functions

21. What is data consistency ?

22. Write the difference between table constraint and column constraint.

23. Write notes on :
    I.   MAX() function
    II. MIN() function

24. What is Set in Python ?

PART - III

III . Answer any six questions. Question No. 33 is compulsory.   **6 X 3 = 18**

25. Write any three characteristics of modules.

26. Write a note on Asymptotic notation.

27. What are string literals?

28. Write a note on if..else Structure.

29. Write about composition in functions with an example.

30. What are the differences between List and Dictionary ?

31. What is the role of DBA?

32. Differentiate - Python and C++.

33. Write a Python code to check whether a given year is leap year or not.

PART - IV

IV. Answer all the questions.   **5 X 5 = 25**

34. (A) What is Binary Search ? Explain with an example.

    OR

    (B) How will you facilitate data abstraction ? Explain it with suitable example.

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

    OR

    (B) Explain the scope of variables with an example.

36. (A) Explain about string operators in Python with suitable example.

    OR

    (B) What are the different ways to insert an element in a list ? Explain with suitable example.

37. (A) Explain the characteristics of DBMS.

    OR

    (B) Explain about SQLite and the steps to be used.

38. (A) Write the different methods to read a file in Python.

    OR

    (B) Write any five features of Python.