STD: XII   **MARKS: 70**

SUB: COMPUTER SCIENCE   **TIME: 2.30 MINS**

HALF – YEARLY MODEL QUESTION PAPER – 5

PART – I

I. CHOOSE THE CORRECT ANSWER: **15*1=15**

1. Containers for mapping names of variables to objects are called _____.

   a) Scope   b) Mapping   c) Binding   d) Namespaces

2. The data type whose representation is unknown are called _____.

   a) Built in data type   b) Derived data type   c) Concrete data type (D) Abstract dat type

3. The functions which wi l give exact result when same arguments are passed are ca led _____.

   a) Impure funct ons   b) Partial Functions   c) Dynamic Functions   d) Pure functions

4. Which of the following shortcut is used to create new Python Program?

   a) Ctrl + C   b) Ctrl + F   c) Ctrl + B   d) Ctrl + N

5. Time complexity of bubble sort in best case is _____.

   a) $\theta(n)$ b) $\theta(nlogn)$ c) $\theta(n2)$ d) $\theta(n(logn)2)$

6. elif can be considered to be abbreviation of _____ __.

   a) nested if   b) if..else   c else if   d) if..elif

7. A Function which calls itself is called as _____

   a) Built-in   b) Recursion   c) Lambda   d) return

8. What is stride?

   a) Index value of slide operation   b) first argument of slice operation

   c) Second argument of slice operation   d) third argument of slice operation

9. Which of the following set opera n includes all the elements that are in two sets but no the one that are common to two sets?

   a) Symmetric difference   b) Diff rence   c) Intersection   d) Union

10. A private class variable is prefixed with _____.

    a __   b) &&   c) ##   d) **

11. What symbol is used for SELECT statement?

    a) σ b) Π c) X   d) Ω

12. Which of the following mode is used when dealing with non-text files like image or exe files?

    a) Text mode   b) Binary mode   c) xls mode   d) csv mode

13. 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

14. Which of the following is a software design technique to split your code into separate parts?

    a) Object oriented Programming   b) Modular programming

    c) Low Level Programming   d) Procedure oriented Progr mming

15. Which of the following executes the SQL command to perform some action?

    a) Execute()   b) Key()   c) Cursor()   d) run()

PART – II

II ANSWER ANY 6 QUESTIONS: (Q.No.22 Compulsory)   **6*2=12**

16. Define Subroutines

17. What are Keywords and Boolean Literals in Python?

18. Define Sequential St tement with example.

19. Define the following Built – in String Functions: a) len()   b) capitalize()

20. Define Class in Python

21. What is Data Consistency?

22. Define Dictionary Comprehension

23. What are the ways to read a CSV File?

24. What is use of next() function?

PART – III

III. ANSWER ANY 6 QUESTIONS: (Q.No.31 Compulsory)   **6*3=18**

25 What are the Characteristics of Interface?

26. Explain the three Asymptotic Notations used to represent the time complexity of Algorithms?

27. How to pass the parameters in Func i ns?

28. Write a Python Program to check whether the given string is palindrome or not

29. Define the following list functions: a) max()   b) min()   c) sum()

30. What are the SQL Commands which comes under DML?

31. Define COMMIT and TRUNCATE Command

32. What is the difference between Compiler and Interpreter?

33. Define SQL WHERE CLAUSE

PART IV

IV. ANSWER THE FOLLOWING QUESTIONS: **5*5=25**

34. a) Write any five benefits in using modular programming.

[OR]

    b) Explain the Selection sort algorithm with example.

35 a) W ite a program to display Fibonacci series 0 1 1 2 3 4 5…… (upto n terms)

[OR]

    b) Explain the following built-in functions

  i) id()   ii) chr()   iii) round()   iv) typ ()   v) pow()

36. a) Explain the different set operations supported by python with suitable example.

[OR]

    b) Explain about string operators in python with suitable example.

37. a) Explain the different operators in Relational algebra with suitable examples.

[OR]

    b) Explain the TCL Commands?

38. a) Differentiate Excel file and CSV file.

[OR]

    b) Write a Python script to create a table called ITEM with following specification.

    Add one record to the table.

    Name of the database - BC

    Name of the table:- Item

    Column name and specification:-

Icode	:-	integer and act as primary key
Item Name	:-	Character with length 25
Rate	:	Integer
Record to be added	:-	1008, Monitor,15000

// ALL THE BEST