COMMON HALF YEARLY EXAMINATION- 2024
*   Standard - XII

Time : 3.00 hrs   COMPUTER SCIENCE   Marks: 70
Part - I   15×1=15

Note: i) Answer all the questions.
       ii) Choose the most appropriate answer from the given four alternatives and write the corresponding answer:

1) Which of the following is a unit of code that is often defined within a greater code structure?
   a) Subroutines   b) Function   c) Files   d) Modules

2) The data structure which is a mutable ordered sequence of elements is called
   a) Built in   b) List   c) Tuple   d) Derived data

3) Which members are accessible from outside the class?
   a) Public members   b) Protected members
   c) Secured members   d) Private members

4) The Python prompt indicates that Interpreter is ready to accept instruction
   a) >>>   b) <<<   c) #   d) <<

5) Which statement is generally used as a placeholder?
   a) continue   b) break   c) pass   d) goto

6) Which of the following keyword is used to exit a function block?
   a) define   b) return   c) finally   d) def

7) What will be the output of the following code?
   strl="Chennai Schools"
   strl[7]="-"
   a) Chennai-schools   b) Chenna-School   c) Type error   d) Chennai

8) If List =[17,23,41,10] then List.append(32) will result
   a) [32,17,23,41,10]   b) [17,23,41,10,32]   c) [10,17,23,32,41]   d) [41,32,23,17,10]

9) Which of the following method is automatically executed when an object is created?
   a) _object_()   b) _del_()   c) _func_()   d) _init_()

10) Who developed ER model?
    a) Chen   b) EF Codd   c) Chend   d) Chand

11) The command to delete a table is _____
    a) DROP   b) DELETE   c) DELETE ALL   d) ALTER

12) A CSV file is also known as a _____
    a) Flat file   b) 3D file   c) String file   d) Random file

13) A framework for interfacing Python and C++ is
    a) Ctypes   b) SWIG   c) Cython   d) Boost

14) Which of the following is a control structure used to traverse and fetch the records of the database?
    a) Pointer   b) Key   c) Cursor   d) Insertion point

15) Read the statements given below. Identify the right option from the following for pie chart.

Statement A: To make a pie chart with Matplotlib, we can use the plt.pie() function.

Statement B: The autopct parameter allows us to dispay the percentage value using the Python string formatting

a) Statement A is correct
b) Statement B is correct
c) Both the Statements are correct
d) Both the Statement are wrong

Part - II

Note: Answer any six questions. Question No. 24 is compulsory: 6×2=12

16) What do you mean by Namespace?

17) What is an Algorithm?

18) Write short notes on Tokens.

19) What is slicing?

20) What is the purpose of Destructor?

21) What is normalization?

22) Differentiate Unique and Primary Key constraint

23) What is use of next() function?

24) Write a query that selects all students whose age is less than 18 in order wise.

Part - III

Note: Answer any six questions. Question No. 33 is compulsory: 6×3=18

25) Differentiate Concrete data type and abstract datatype

26) Why access control is required?

27) Explain Ternary operator with examples.

28) Differentiate ceil() and floor() function?

29) Explain the difference between del and clear() in dictionary with an example.

30) What is the role of DBA?

31) Differentiate PYTHON and C++?

32) Mention the difference between fetchone() and fetchmany()

33) Using if......else...elif statement write a suitable program to display largest of 3 numbers

Part - IV

Note: Answer all the questions:-   5×5=25

34) a) What are called Parameters and write a note on
   i) Parameter without Type   ii) Parameter with Type   **[or]**
   b) Discuss about Linear search algorithm.

35) a) Write a detail note on for loop.   **[or]**
   b) Explain the following built-in-functions.
      a) id()   b) chr()   c) round()   d) type()   e) pow()

36) a) What are the different ways to insert an element in a list. Explain with suitable example.   **[or]**
   b) Explain about string operators in python with suitable example.

37) a) Explain the different types of data model.   **[or]**
   b) Differentiate Excel file and CSV file.

38) a) What is the use of HAVING clause? Give an example python script. **[or]**
   b) Explain the various buttons in a matplotlib window

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