MODEL EXAM – 2022-23 – FULL PORTION

CLASS : XII	TIME : 3.00 Hrs
SUBJECT : COMPUTER SCIENCE	MARKS : 70

I . CHOOSE THE BEST ANSWER   15 X 1 = 15

1. Which of the following is a distinct syntactic block?
(A) Subroutines   (B) Function   (C) Definition   (D) Modules

2. Which of the following functions that retrieve information from the data type?
(A) Constructors   (B) Selectors   (C) recursive   (D)Nested

3. Which of the following members of a class can be handled only from within the class?
(A) Public members   (B)Protected members   (C) Secured members   (D) Private members

4. Two main measures for the efficiency of an algorithm are
(A) Processor and memory (B) Complexity and capacity (C) Time and space   (D) Data and space

5. Which of the following is not a token ?
(A) Interpreter   (B) Identifiers   (C) Keyword   (D) Operators

6. What plays a vital role in Python programming?
(A) Statements   (B) Control   (C) Structure   (D) Indentation

7. Read the following statement and choose the correct statement(s).
(I) In Python, you don't have to mention the specific data types while defining function.
(II) Python keywords can be used as function name.
(A) I is correct and II is wrong   (B) Both are correct
(C) I is wrong and II is correct   (D) Both are wrong

8. What will be the output of the following code?
str1 = "Chennai Schools"
str1[7] = "-"
(A) Chennai-Schools   (B) Chenna-School   (C) Type error   (D) Chennai

9. If List=[10,20,30,40,50] then List[-2]=35 will result
(A) [35,10,20,30,40,50]   (B) [10,20,30,40,50,35]   (C) [10,20,30,35,50]   (D) [10,35,30,40,50]

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

11. Who developed ER model?
(A) Chand   (B) EF Codd   (C) Chend   (D) Chen

12. The command used to skip a row in a CSV file is
(A) skip()   (B) omit()   (C) next()   (D) bounce()

13. A framework for interfacing Python and C++ is
(A) Ctypes   (B) SWIG   (C) Cython   (D) Boost

14. SQLite falls under which database system?
(A) Flat file database system   (B) Relational Database system
(C) Hierarchical database system   (D) Object oriented Database system

15. Identify the right type of chart using the following hints.
Hint 1: This chart is often used to visualize a trend in data over intervals of time.
Hint 2: The line in this type of chart is often drawn chronologically.
(A) Bar chart   (B) Line chart   (C) Pie chart   (D) Scatter plot

II. ANSWER <u>ANY SIX</u> OF THE FOLLOWING :-   6 X 2 = 12
   (Question No. 24 Compulsory)

16. Differentiate interface and implementation
17. What is searching? Write its types
18. What is a literal? Explain the types of literals ?
19. Write is the syntax of if..else statement
20. What is base condition in recursive function?
21. List the types of Visualizations in Matplotlib
22. Write the syntax of creating a Tuple with n number of elements.
23. Mention the two ways to read a CSV file using Python
24. What is the advantage of declaring a column as "INTEGER PRIMARY KEY"

III. ANSWER <u>ANY SIX</u> OF THE FOLLOWING :-   6 X 3 = 18
   (Question No. 33 Compulsory)

25. Differentiate pure and impure function
26. What are the different ways to access the elements of a list. Give example.
27. Explain Ternary operator with examples
28. What are the points to be noted while defining a function?
29. What is the use of format( )? Give an example.
30. What are class members? How do you define it?
31. Write a note on different types of DBMS users.
32. What is a constraint? Write short note on Primary key constraint
33. Write a Python program to read a CSV file with default delimiter comma (,).

IV. ANSWER THE FOLLOWING IN DETAIL:-   5 X 5 = 25

34. (A) Explain the types of scopes for variable or LEGB rule with example.   (OR)
    (B) What is Binary search? Discuss with example

35. (A) Explain input() and print() functions with examples.   (OR)
    (B) Write a detail note on for loop

36. (A) Explain about string operators in python with suitable example.   (OR)
    (B) Explain the different set operations supported by python with suitable example

37. (A) Explain the characteristics of DBMS.   (OR)
    (B) What are the components of SQL? Write the commands in each.

38. (A) Differentiate Excel file and CSV file   (OR)
    (B) What is the purpose of sys, os, getopt module in Python Explain.