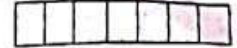


HSL

HALF YEARLY EXAMINATION - 2023**12** - Std**COMPUTER SCIENCE**

Time : 3.00 Hrs

SALEM DISTRICT

Marks : 70

PART - I

Note:(1) Answer all the questions (ii)choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer .

15 x 1=15

- Which of the following defines what an object can do?
a) Operating System b) Compiler c) Interface d) Interpreter
- The data type whose representation is known are called
a) Built in data type b) Derived datatype
 c) Concrete datatype d) Abstract datatype
- The members that are accessible from within the class are also available to its subclasses is called
a) Public members
 b) Protected members c) Secured members d) Private members
- 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
- Which operator is also called as Conditional operator?
 a) Ternary b) Relational c) Logical d) Assignment
- Which statement is generally used as a place holder?
a) continue b) break c) pass d) goto
- Which of the following keyword is used to begin the function block?
a) define b) for c) finally d) def
- 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
- Let list1 = [2,4,6,8,10] then print (List[-1]) will result in
 a) 10 b) 8 c) 4 d) 6
- Which of the following are the key features of Object Oriented Programming language?
 a) Constructor and classes b) Constructor and object
c) Classes and Objects d) Constructor and Destructor
- Who is called as the father of relational database from the following?
a) Chris Date b) Hugh Darween c) Edgar Frank Codd d) Edgar Frank Cadd
- The command to delete a table including the structure is
 a) DROP b) DELETE c) DELETE ALL d) ALTABLE
- The mode which is used when dealing with non-text files like image or exe files:
a) xlsmode b) Text mode c) csv mode d) binary mode
- The expansion of API is
a) Application Programming Interpreter b) Application Programming Interface
c) Application Performing Interface d) Application Programming Interlink

15. Which of the following keyword avoid the duplicate ?
 a) Distinct b) Remove c) Where d) Group By

PART - II

ANSWER ANY SIX. Q NO: 24 IS COMPULSORY.

6 X 2= 12

16. What is an abstract data type ?
 17. What do you mean by Namespaces?
 18. What are the main advantages of function?
 19. What are the different modes that can be used to test Python program?
 20. What will be the output of the following code?
 List=[x**2 for x in range(1,5)]
 print(list)
 21. what is the purpose of destructor?
 22. What is the difference between hierarchical and Network data model?
 23. List the general types of data visualization?
 24. Write the Syntax to execute the python program to run the c++ program?

PART - III

ANSWER ANY SIX Q NO : 33 IS COMPULSORY

6 X 3= 18

25. Why strlen is called pure function ?
 26. What do you understand by dynamic programming?
 27. What are the different ways to access the elements of a list .Give example
 28. Why access control is required
 29. List the characteristics of an algorithm
 30. What are the class members and how do you define it?
 31. Explain Cartesian product with a suitable example?
 32. What is the difference between write mode and append mode ?
 33. Write a python program to print the following pattern
 1
 12
 123
 1234
 12345

PART - IV

ANSWER THE FOLLOWING

5 X 5 =25

34. What is Linear search? Discuss with an example. (OR)
 Explain input() and print() functions with examples.
 35. What is nested tuple ? Explain with an example. (OR)
 (i)What is slicing (ii)What is output for the following python commands?
 str="Thinking with python"
 a) Print(str[:3]) b) print(str[::3]) c) print(str[9:13])
 36. Explain the following built-in function.
 (a) id() b) chr() c) round() d) type() e) pow() (OR)
 Write a detail note on for loop ?
 37. Differentiate DBMS and RDBMS. (OR)
 Write the different types of constraints and their functions
 38. Write in brief about SQLite and the steps used to use it. (OR)
 What are the key Differences between Histogram and Bar Graph?