Madurai.   Harish Laxmanan.

2RM

SECOND REVISION TEST - 2023

12 - Std   **COMPUTER SCIENCE**   7 1 8 7 7 9 8

Time : 3. 00 Hrs.   Marks : 70

PART-A

I.   **(i)All questions are compulsory**   **15 X 1 =15**

       (ii)Choose the most appropriate answer.

1.   Which of the following is a unit of code that is often defined within a greater structure?

     (a) Subroutines   (b) Functions   (c) Files   (d) Modules

2.   Let List = [2,4,6,8,10] , then print (List[-3]) will result in :

     (a) 4   (b) 6   (c) 8   (d) 10

3.   The word comes from the name of a Persian Mathematician Abu Ja'Far Mohammed ibn-I Musa al Khowarizmi is called

     (a) Algorithm   (b) Flowchart   (c) Syntax   (d) Flowchart

4.   Which operator is also called as Comparative operator?

     (a) Arithmetic   (b) Relational   (c) Logical   (d) Assignment

5.   Which of the following special character is used to define variable length arguments?

     (a) &   (b) $ (c) *   (d) #

6.   What is stride?

     (a) index value of slice operation   (b) first argument of slice operation

     (c) second argument of slice operation   (d) third argument of slice operation

7.   In python the class method must have which named argument as first argument?

     (a) self   (b) rec   (c) global   (d) key

8.   Which of the following is used as placeholders or replacement fields which get replaced along with format( ) function?

     (a) { }   (b) < >   (c) + +   (d) ^ ^

9.   The class instantiation means

     (a) creating a class   (b) Creating a constructor

     (c) creating a destructor   (d) Creating an object

10. The symbol of project in relational algebra of DBMS

     (a) σ   (b) π   (c) Ç   (d) È

11. A column in database table is known as an

     (a) attribute   (b) relation   (c) tuple   (d) data

12. Pick odd one:

     (a) Insert   (b) delete   (c) update   (d) truncate

13. —— is a built-in variable which evaluates to the name of the current module

     (a) _ _name_ _   (b) _ _main_ _   (c) _ _mode_ _   (d) _ _init_ _

14. Which of the following clause avoid the duplicates in SQL?

     (a) DISTINCT   (b) HAVING   (c) WHERE   (d) GROUPBY

15. The function to make a pie chart with Matplotlib

     (a) Plt.bar( )   (b) pie.plt( )   (c) bar.plt( )   (d) plt.pie( )

2RM   12 - கணினி அறிவியல்   Page - 1

PART-B

II   **Answer any six questions (question no. 24 is compulsory)**   6 X 2 = 12

16. What is subroutine?
17. What is enclosed type? Scope.
18. What is base condition in recursive function?
19. What are membership operators in python?
20. What is the postitive and negative subscript value of the character 'h' in string 'school'?
21. Differentiate Unique and Primary key constraint.
22. What are the shapes to represent database structures in ER model?
23. Mention the two ways to read a CSV file using Python.
24. What will be the output of the following snippet?

```
alpha = list(range(65,70))
for x in alpha:
print(chr(x),end='\t')
```

PART-C

III   **Answer any six questions (question no. 33 is compulsory)**   6 X 3 = 18

25. What are constructors and selectors?
26. What is List ? Why list can be called as Pairs?
27. What is the role of range( ) in for loop of Python?
28. Differentiate ceil( ) and floor( ) function?
29. What is pie chart? How will create pie chart in Python?
30. How do you define constructor and destructor in Python?
31. Describe the database structure.
32. Write short note on any three DDL commands.
33. Write a short note on string slicing with syntax and example.

M. Harish Laxmanan
SP J M HSS
Madurai.

PART-D

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

34. a) Discuss about Linear Search algorithm. **(OR)**
   b) Discuss in detail about Tokens in Python.
35. a) Explain the following built-in functions.
   (i) id( )   (ii) chr( )   (iii) round( )   (iv) type( )   (v) pow( ) **(OR)**
   b) Explain different types of operators in Python.
36. a) Explain the Set Operations supported by Python with suitable example. **(OR)**
   b) What will be the output of the following Python program?

```
A= {x*3 for x in range(1,6)}
B= {y **2 for y in range(1,10,2)}
print(A) print(B) print(A|B) print(A-B) print(A&B) print(A^B)
```

37. a) Consider the following employee table. Write SQL commands for the questions (1) to (5)

EMP CODE	NAME	DESIG	PAY	ALLOWANCE
S1001	Vidhya	Operator	10000	5500
P1002	Vetri	Supervisor	29000	12000
P1003	Munis	Clerk	8000	4500
C1004	Karthick	Operator	12000	6500
M1005	Sheik	Mechanic	20000	7000

   (1) To display the details of all employees in ascending order of pay
   (2) To display all employees whose allowance is between 5000 and 7000
   (3) To remove the employee who are Mechanic   (4) To add a new row
   (5) To display the details of all employees who are operators. **(OR)**
   b) Explain the types of relationships used in database
38. a) What are the key difference between Histogram and Bar graph? **(OR)**
   b) What is MinGW?. What is its use?

2RM   12 - கணினி அறிவியல்   Page - 2