XII   Reg.No

Padasalai's Centum Special Question Paper

COMPUTER SCIENCE - FULL PORTION EXAM - 1

Time : 3.00 hours   **Max. Marks : 70**

PART – I

Note : i) Answer all the questions   **15x1=15**
   ii) Choose the most appropriate from the given four alternatives and write the option
    code and corresponding answer

1. Tuple is constructed by using .... and ....
  a. () ,   b. [ ] , c. [ ] , ;   d. (), ;

2. By default , the C++ and Java class members are...........
  a. private b. protected c. public   d. Local

3. O(n) is an example of...............
  a. best case b. worst case c. Average case d. Null case

4. Which made can also be used as a simple calculator?
  a. calc mode b. interactive mode c. script mode d. code mode

5. range(30,3,-3) will start the range of values from...... and end at..........
  a. 30,3   b. 30,-3   c. 30,6   d. 30,6

6. What will be the output of the following python snippet?
```
c=5
def add( ):
  c=c+5
  print(c)
add()
```
  a. 5   b. 10   c. 15   d. error

7. What will be the output of print(len("CHENNAI")?
  a. 7   b. 8   c. 9   d. Error

8. What will be the output of the following code?
  list=[3**x for x in range(5)] print(list)
  a. [1,3,6,9,18,21] b. [1,3,7,39,81] c. [1,3,9,27,81] d. None

9. Which of the following are the key features of an Object Oriented Programming language?
  (a) Constructor and Classes (b) Constructor and Object
  (c) Classes and Objects   (d) Constructor and Destructor

10. What symbol is used for SELECT statement?
  a) σ   b) Π   c) X   d) Ω

11. The SQL command 'Truncate' comes under............
  a. DDL   b. DML   c. TCL   d. DQL

12. Which of the following creates an object which maps data to a dictionary?
  (A) listreader() (B) reader() (C) tuplereader() (D) DicReader ()

13. getopt() will return an empty array if there is no error in splitting strings to
  (A) argv variable (B) opt variable (c)args variable (d) ifile variable

14. Which of the following is an organized collection of data?
  (A) Database (B) DBMS (C) Information (D) Records

15. To make a bar chart with matplotlib, which function should be used?
  a. plt.bar( ) b. plt.chart( ) c. pip.bar( ) d. pip.chart( )

PART – II

Note : Answer any six questions : Q.No 24 is compulsory   6x2=12

16. What is subroutine?
17. What is LEGB rule?
18. What are keywords in Python?
19. Define short notes on floor division operator.
20. What is the difference between hierarchical and network data model?
21. What is use of next( ) function?
22. What is the advantage of declaring a column as "INTEGER PRIMARY KEY"?
23. What is Pip?
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 – III

Note : Answer any six questions : Q.No 33 is compulsory   6x3=18

25. Differentiate concrete data type and abstract data type.
26. What are the factors that influence time and space complexity?
27. List the differences between break and continue statements.
28. Write a note about count( ) function in Python.
29. What are class members? How do you define it?
30. Write any 3 DDL commands.
31. Differentiate Python and C++.
32. Write any 3 uses of data visualization.
33. Write short note on Unary relational operations of DBMS.

PART – IV

Note : Answer all the questions: 5x5=25

34. Explain with an example interface and implementation.   **(OR)**
    Discuss about Linear search algorithm.
35. Explain the different operators in Python.   **(OR)**
    Write the output for the following python programs:
    i) j=15
       while j>=10:
         print(j,end='\t')
         j=j-1
       else:
         print("\n End of the loop")
    ii) k=5
       while k<=9:
         for i in range(1,k):
             print(i,end='\t')
         print(end='\n')
       k=k+1
36. What is nested tuple? Explain with an example.   **(OR)**
    Explain the different types of relationship mapping.
37. Tabulate the different mode with its meaning.   **(OR)**
    Write the syntax for getopt( ) and explain its arguments and return values.
38. What is the use of HAVING clause? Give an example python script. **(OR)**
    Explain the purpose of the following function:
       a) plt.xlabel   b) plt.ylabel   c. plt.title   d. plt.legend( )   e. plt.show( )