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COMMON HALFYEARLY EXAMINATION - 2024

Standard - XII Reg.No. ☐☐☐☐☐☐

Time: 3.00 hrs. **COMPUTER SCIENCE** *Marks:70*

PART – I

Answer all the questions: 15×1=15

1. The function which will give exact result when same arguments are passed are called
   a) Pure function b) Impure functions c) Partial functions d) Dynamic functions

2. A sequence of immutable objects is called
   a) Derived data b) Built in c) List d) Tuple

3. Which of the following members of a class can be handled only from within the class?
   a) Public members b) Private members
   c) Protected members d) Secured members

4. Two main measures for the efficiency of an algorithm are
   a) Data and space b) Processor and memory
   c) Complexity and capacity d) Time and space

5. Expand IDLE :
   a) Integrated Design Learning Environment
   b) Insert Development Learning Environment
   c) Integrated Develop Learning Environment
   d) Integrated Development Learning Environment

6. What is the output of the following snippet?
   for i in range (2, 10, 2):
       print (i, end = " ")
   a) 8642 b) 246810 c) 2468 d) 246

7. Which statement is used to skip the remaining part of the loop and start with next iteration?
   a) Break b) pass c) continue d) null

8. Marks = [20, 40, 60, 80, 100]
   print (Marks [-2])
   What will be the output?
   a) 60 b) 100 c) 40 d) 80

9. In Python, which of the following class declaration is correct?
   a) class class_name: b) class class_name< >
   c) class class_name d) class class_name[]

10. The Relational Database model was first proposed by:
    a) C.D.Darween b) Chris Date c) E.F.Codd d) Hugh Darween

11. The clause used to sort data in a database:
    a) GROUP BY b) SORT BY c) SELECT d) ORDER BY

12. What symbol is used for SELECT statement ?
    a) Ω b) σ c) π d) x

13. _____ is the collection of resources assembled to create a single unified visual display.
    a) Interface b) Dashboard c) Objects d) Graphics

14. SQLite falls under which datebase system?
    a) Flat File Datebase System b) Relational datebase System
    c) Hierarchical Datebase System d) Objects Oriented Database System

15. Which of the following mode is used when dealing with non-text files like image or exe files?
    a) Text mode b) Binary mode c) xls mode d) CSV mode

PART-II

Answer any six questions.QuestionNo.24.is compulsory.   6×2=12

16. What do you mean by Namespaces?
17. What is searching? Write its types.
18. Write short notes on Tokens.
19. What are the main advtanges of function?
20. How will you delete a string in Python?
21. What is instantiation?
22. What is the difference between Hierarchical and Network data model?
23. Mention the two ways to read a CSV file using Python.
24. Write the output of the following snippet.

```
str1 = "SCHOOL"
print (str1*4)
```

PART-III

Answer any six questions.QuestionNo.33.is compulsory.   6×3=18

25. List the characteristics of an Algorithm.
26. List the difference between break and continue statements.
27. Write the rules of local variables.
28. Write the syntax of 'while' loop.
29. Mention the difference between fetchone () and fecthmany ().
30. Write any three DDL commands.
31. Write any three uses of data visualization.
32. What is the use of where clause? Give a python statement using the where clause.
33. What will be the output of the following code?

```
list=[3**x for x in range(5)]
print(list)
```

PART - IV

Answer all the questions: 5×5=25

34. a) How will you facilitate data abstraction. Explain it with suitable example.

     (OR)

     b) Explain the scope of variables with an example.

35. a) Explain following built-in functions:

     i) id()   ii) chr()   iii) round()   iv) type()   v) pow()

     (OR)

     b) Explain about string operators in python with suitable example.

36. a) Explain the different set operations supported by python with suitable example.

     (OR)

     b) Explain about constructor and destructor with suitable example.

37. a) Explain the different types of data model.

     (OR)

     b) Write the different types of constraints and their functions.

38. a) What is the use of HAVING clause. Give an example python script.

     (OR)

     b) Explain the various buttons in a matplotlip window.