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Register no:

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QUARTERLY EXAMINATION - 2024
COMPUTR SCIENCE
PART - 1

Marks: 70

15 x 1=15

Time: 3.00 Hours

Answer all the questions.

- Which of the following defines what an object can do?
(a) Operating System (b) Interpreter (c) Interface (d) Compiler
- The data structure which is a mutable ordered sequence of elements is called.
(a) Build in (b) List (c) Tuple (d) Derived data
- Containers for mapping names of variables to objects is called
(a) Scope (b) Mapping (c) Binding (d) Function Scope
- 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
- The Python prompt indicates that Interpreter is ready to accept instruction.
(a) >>> (b) <<< (c) # (d) <<
- Which of the following is not Logical operator?
(a) and (b) or (c) not (d) Assignment
- What plays a vital role in Python programming?
(a) Statements (b) Control (c) Structure (d) Indentation
- A Function which calls itself is called as
(a) Build-in (b) Recursion (c) Lambda (d) return
- Pick the correct one to execute the given statement successfully
(a) $x\%2=0$ (b) $x\%4=0$ (c) $x/4=0$ (d) $x\%4=0$
- Which of the following operator is used for concatenation?
(a) + (b) & (c) * (d) =
- The subscript of a string may be:
(a) Positive (b) Negative (c) Both (a) & (b) (d) Either (a) or (b)
- list1=[1,2,3,4], then print(List[-2]) will result in
(a) 1 (b) 2 (c) 3 (d) 4
- $s=(x**2 \text{ for } x \text{ in } \text{range}(5))$
(a) [0,1,2,3,4] (b) [1,2,3,4,5] (c) [0,1,4,9,16] (d) [2,4,6,8,10]
- Which of the following method is automatically executed when an object created?
(a) `_object_()` (b) `_del_()` (c) `_func_()` (d) `__init__()`
- The process of creating an object is called as:
(a) Constructor (b) Destructor (c) Initialize (d) Instantiation

PART - II

6 x 2 = 12

Answer any six questions. Q.No. 24 is Compulsory

16. What is a subroutine?
17. What is a Tuple? Give an example.
18. What do you mean by Namespaces?
19. What are the different modes that can be used to test Python Program?
20. Write the syntax of if...else statement.
21. Write the different types of function
22. What will be the output of the following python code? `str1="school" print(str1*3)`
23. What will be the value of x in following python code? `list1=[2,4,6[1,3,5]] x=len(list1)`
24. What is class?

PART - III

6 x 3 = 18

Answer any six questions. Q.No. 33 is Compulsory

25. Why strlen is called pure function?
26. Which strategy is used for program design? Define the Strategy
27. Why access control is required?
28. List the characteristics of an algorithm.
29. Explain Ternary operator with examples.
30. List the Differences between break and continue statements.
31. Write a short notes about the following with suitable example:
 - (a) capitalize()
 - (b) swapcase()
32. What are the difference between List and Dictionary?
33. Write a Python code to check whether a given year is leap year or not.

PART - IV

5 x 5 = 25

Answer all the questions.

34. Explain with example Pure and impure functions. (OR)
What is List? Why List can called as Pairs. Explain with suitable example
35. Explain LEGB rule with example. (OR)
Write any five benefits in using modular programming
36. What is Binary search? Discuss with example. (OR)
Explain input() and print() functions with examples.
37. Explain about string operators in python with suitable example. (OR)
What is the purpose of range()? Explain with an example.
38. Explain in different set operations supported by python with suitable example. (OR)
Explain about constructor and destructor with suitable example.