First Half Portion Question paper-2024

Class   : XII   **Subject : Computer Science**
Marks : 70   **Time   : 3 Hrs**

I.Choose the correct answer   1X15=15

1. The variables in a function definition are called as
   (A) Subroutines (B) Function (C) Definition (D) Parameters
2. The values which are passed to a function definition are called
   (A) Arguments (B) Subroutines (C) Function (D) Definition
3. The data type whose representation is known are called
   (A) Built in datatype (B) Derived datatype (C) Concrete datatype (D) Abstract datatype
4. The data type whose representation is unknown are called
   (A) Built in datatype (B) Derived datatype (C) Concrete datatype (D) Abstract datatype
5. The process of binding a variable name with an object is called
   (A) Scope (B) Mapping (C) late binding (D) early binding
6. Which of the following is used in programming languages to map the variable and object?
   (A) :: (B) := (C) = (D) ==
7. From the following sorting algorithms which algorithm needs the minimum number of swaps?
   (A) Bubble sort (B) Insertion sort (C) Selection sort (D) All the above
8. 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
9. The Python prompt indicates that Interpreter is ready to accept instruction.
   (A) >>> B) <<< C) # D) <<
10. Which of the following shortcut is used to create new Python Program ?
    A) Ctrl + C B) Ctrl + F C) Ctrl + B D) Ctrl + N
11. elif can be considered to be abbreviation of
    A) nested if B) if..else C) else if D) if..elif
12. What plays a vital role in Python programming?
    A) Statements B) Control C) Structure D) Indentation
13. Which of the following keyword is used to begin the function block?
    A. define (B) for (C) finally (D) def
14. Which of the following keyword is used to exit a function block?
    A. define (B) return (C) finally (D) def
15. Strings in python: (A) Changeable (B) Mutable (C) Immutable (D) flexible

II.Answer any six questions.Q.NO:24 is compulsory   6X2=12

16. Write the inference you get from X:=(78).
17. What is a List? Give an example.
18. What is Mapping?
19. What is Sorting?
20. Write short notes on Exponent data?
21. Define control structure.
22. Define global scope
23. What will be the output of the following python code?
    str1 = "School"
    print(str1*3)
24. What is slicing?

III. Answer any six questions.Q.NO:33 is compulsory   6X3=18

25. Differentiate pure and impure function.
26. Which strategy is used for program designing? Define that Strategy
27. Define Enclosed scope with an example
28. Write a note on Asymptotic notation
29. What are string literals? Explain.
30. Write a program to display
    A
    A B
    A B C
    A B C D
    A B C D E
31. What is composition in functions?
32. Write a short about the followings with suitable example:
    (a) capitalize( ) (b) swapcase( )
33. Write a note about count( ) function in python

IV.Write in any five questions: 5X5=25

34. Explain with an example interface and implementation
35. What is a List? Why List can be called as Pairs. Explain with suitable example
36. Explain the types of scopes for variable or LEGB rule with example.
37. What is Binary search? Discuss with example
38. Explain input() and print() functions with examples.
39. Write a program to display all 3 digit odd numbers.
40. Explain the following built-in functions.
    A. id()   B. chr() C. round() D. type()   E. pow()
41. Explain about string operators in python with suitable example