21UCS412

FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2021 ONLY)   REG.NO

NGM COLLEGE (AUTONOMOUS) POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY-2023

B. Sc-Computer Science (Aided & SF)   **MAXIMUM MARKS: 70**

IV SEMESTER   **TIME: 3 HOURS**

PART III

PYTHON PROGRAMMING

SECTION – A   **(10 X1 = 10 MARKS)**
ANSWER THE FOLLOWING QUESTIONS
MULTIPLE CHOICE QUESTIONS   **(K1)**

1.   Which of the following is true for variable names in Python?
     a) Unlimited length
     b) Underscore and ampersand are the only two special characters allowed
     c) All private members must have leading and trailing underscores
     d) Limited length.

2.   A conditional statement with a series of alternative branches is called _____
     a) Chained condition   b) Branch condition
     c) Compound condition   d) Looping condition

3.   Suppose list1 is [1, 5, 9], what is sum(list1)?
     a) 1   b) 9   c) 5   d) 15

4.   When is the finally block executed?
     a) There is no exception
     b) There is an exception
     c) only if some condition that has been specified is satisfied
     d) always

5.   Which predefined Python function is used to find length of string?
     a) length()   b) stringlen()   c) len()   d) stringlength()

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES   **(K2)**
6.   How do you comment multiple lines in Python?

7.   What is the difference between list and tuple?

8.   Write the basic syntax of defining function in Python.

9.   What is an exception?

10. Mention the use of the split function in Python?

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SECTION – B   (5 X 4 = 20 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11.   (a) What is Python? How is Python interpreted? Explain
                      (OR)
     (b) Discuss the standard data types in Python

12.   (a) Write a python program to find biggest of two numbers using conditional Opertor.
                      (OR)
     (b)What are Python's dictionaries? Explain how to create a dictionary in python.

13.   (a) Discuss the various types of function and its use.
                      (OR)
     (b) Design a python program using filter( ) and map( ) built-in functions

14.   (a) How is exception hierarchy handled in Python?
                      (OR)
     (b)How to open a new file and read the contents of a file in Python?

15.   (a) What are the Python OOPs Concepts? Write the syntax to create class and object
                      (OR)
     (b)Write Python program to calculate area and perimeter of different Shapes using
        Polymorphism.

SECTION – C   (4 X 10 = 40 MARKS)

ANSWER ANY FOUR OUT OF SIX QUESTIONS.
(16TH QUESTION IS COMPULSORY AND ANSWER ANY THREE
QUESTIONS FROM Q.NO: 17 TO 21)   **(K4) OR (K5)**

16.   Compare the relation between tuples and lists, tuples and dictionaries in detail.

17.   Discuss the Relational operators, Logical operators and Bit wise operators with example

18.   Elucidate the syntax and execution of if statement and for loop statement with example code

19.   Explain the following with example code
     (i) Defining and calling simple functions
     (ii) Mapping Functions in a Dictionary

20.   Demonstrate the use of Exception Handling and Multiple Exceptions in Python with program

21.   Discuss the following with example code
     (i).Simple Character Matches and Greedy Matches
     (ii). Substituting and Splitting a String

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