D 11989   (Pages : 2)   Name...

Reg. No....................................

THIRD SEMESTER (CBCSS–UG) DEGREE EXAMINATION NOVEMBER 2021

Common Course (B.Sc. L.R.P. (Alternate Pattern)

ELE 3A 11—PYTHON PROGRAMMING

(2019–2020 Admissions)

Time : Two Hours and a Half   Maximum : 80 Marks

Section A

Answer at least **ten** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 30.

1. What is python Virtual machine ?

2. What are keywords or reserved words in python ?

3. What are the different Identity operators in python with examples ?

4. Explain input statements in Python.

5. Write the syntax of while loop.

6. What are infinite loops ?

7. What do you mean by indentation ?

8. What is the purpose of Return statement ?

9. Define keyword arguments in a function.

10. What are global variables ?

11. Define recursion.

12. Define mutable and immutable objects. Give examples.

13. How strings are sliced ?

14. How lists can be accessed using while loop ?

15. What is a set ?

(10 × 3 = 30 marks)

Turn over

Section B

Answer at least **five** *questions.*
Each question carries 6 *marks.*
All questions can be attended.
Overall Ceiling 30.

16. Explain the different arithmetic operators used in Python with examples.

17. Discuss the int(), float(), str(), complex() and list() type conversion functions with examples.

18. Write Python code to solve the quadratic equation $ax^2 + bx + c = 0$ by getting the input coefficient from the user.

19. Write a Python program to find the LCM of two numbers.

20. Discuss zip() function with an example.

21. Explain nested function with an example.

22. Describe the syntax for the following function and explain with an example :

    (a) upper().   (b) pop().

    (c) title().   (d) index().

    (e) split().

23. Distinguish between list, tuple and dictionary.

$(5 \times 6 = 30 \text{ marks})$

Section C

Answer any **two** *questions.*
Each question carries 10 *marks.*

24. Write a Python program to reverse a number and find the sum of the digits in the reversed number. Prompt the user for input.

25. Illustrate the decision control statements in Python with flow charts.

26. Write a Python program using function to find the sum and average of the elements in a list without using in built functions

27. Write a Python program that accepts a sentence and calculate the number of words, digits, uppercase letters and lowercase letters.

$(2 \times 10 = 20 \text{ marks})$