D 92929 (Pages : 2) Name.....

Reg. No.....

THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2020

Electronics

ELE 3A 11—GENERAL COURSE I : PYTHON PROGRAMMING

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 a byte code ?
2. What are identifiers in python ?
3. Give the membership operators in python with examples.
4. Explain output statements in Python.
5. Write the syntax of for loop statement.
6. What are loop control statements ?
7. Explain range( ) function.
8. What are the advantages of function ?
9. Define positional arguments in a function.
10. How function call is done in Python ?
11. What are local variables ?
12. What are the different ways to create strings in Python ?
13. What are Lists ?
14. What are the rules for creating keys in a dictionary ?
15. How the elements in a string can be accessed using fir loop ?

(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 relational operators in Python with examples.

17. Write a program to find the sum of all odd and even numbers up to a number specified by the user.

18. Write a program to check whether a number is prime or not. Prompt user for input.

19. Find the area and circumference of a circle. Prompt user for input.

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

    a) abs() b) max() c) pow() d) len() e) sort()

21. Write a program to add two numbers using function.

22. Write a Python code to find the mean and variance from a list of numbers.

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

    a) replace() b) rstrip() c) reverse() d) count() e) join()

(5 × 6 = 30 marks)

Section C

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

24. Explain the different data types used in Python with examples.

25. Write a program to print the sum of the following series : $1 + 1/2 + 1/3 + 1/4 + ... + 1/n$.

26. Write a Python program using function to find the value of ${}_nP_r = n!/(n-r)!$ Without using in built factorial() function.

27. Write a Python program to check for the presence of a key in the dictionary and sum all its values.

(2 × 10 = 20 marks)