PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – ELECTRONICS

PYTHON PROGRAMMING & APPLICATIONS

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1   Which character is used for commenting in Python?
     (i) #   (ii) !   (iii) @   (iv) *

2   What are the advantages of using functions?
     (i) Reduce duplication of code   (ii) Clarity of code
     (iii) Reuse code   (iv) All of the above

3   Which type of operator will we use to access a part of the string?
     (i) { }   (ii) [ ]   (iii) < >   (iv) ( )

4   Which of the following sequence data type is similar to the tuple?
     (i) Dictionaries   (ii) List   (iii) String   (iv) Function

5   Which of the following is the default mode while opening a file?
     (i) Binary   (ii)Number   (iii) Text   (iv) Image

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6 a   Briefly describe the data types in Python.
                        OR
   b   How will you convert a string to an integer in Python?

7 a   Explain about built-in function in Python.
                        OR
   b   Explain Anonymous function in Python.

8 a   Explain the 'slice' operator in python with an example.
                        OR
   b   State the work of 'len' function used in string?

9 a   How to create a tuple in Python?
                        OR
   b   Explain different methods used in deleting elements from dictionary.

10 a   Explain the modes for opening a file.
                        OR
   b   How will you delete and rename a file in Python?

Cont...

SECTION -C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11 a Analyze different types of control statements with an example.

OR

   b Write a Python program to display the Fibonacci sequence for 'n' terms.

12 a Discuss the following: i. The return statement   ii. Parameters and Arguments

OR

   b Write a Python program to implement recursion for factorial of a given number.

13 a Discuss about string formatting functions in Python with an example.

OR

   b What is a list? Explain with an example.

14 a Identify various basic tuples operations and built-in tuple functions in Python with an example.

OR

   b Write a function called 'circleinfo' which takes the radius of circle as argument and returns the area circumference of the circle?

15 a Elucidate the concept of Exception handling with an example.

OR

   b Write a Python program to demonstrate the file I/O operations.

Z-Z-Z   END