

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc.Mathematics - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - VI

24UMAET6A03 - Programming in Python

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Explain different data types in Python.
2. Define recursion. Write a Python program to find the factorial of a number using recursion.
3. Describe various list methods with examples.
4. Illustrate the ways to create and access elements in tuple.
5. How do break statement work inside a loop? Explain with examples.
6. Write a Python program to demonstrate the use of lambda functions.
7. Discuss the methods to format strings in Python.
8. Elaborate user defined exceptions in Python with an example.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain the different types of operators in Python with examples.
10. Compare and contrast for loop and while loop in Python.
11. What are functions in Python? Explain different types of functions in Python with examples.
12. Explain any five built-in string methods in Python with suitable examples.
13. Examine file handling in Python with an example.
