

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.Computer Science - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - II

23UCSCT2003 - Programming using Python

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Explain Python's control flow instructions with examples.
2. Demonstrate list comprehensions and dictionary comprehensions with examples.
3. Analyze the concept of recursive functions in Python with an example.
4. Write a Python program to demonstrate the use of an iterator and generator.
5. Describe the different string operations available in Python.
6. Compare the working of `isinstance()` and `issubclass()` functions in Python.
7. Illustrate how class methods and static methods are used in Python.
8. Justify the importance of exception handling in Python with an example.

Section C

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

9. Explain different data types and operations available in Python with examples.
10. Discuss various list operations and set operations in Python with suitable examples.
11. Evaluate the importance of modules and packages in Python.
12. Analyze different types of inheritance in Python with examples.
13. Compare file handling methods in Python. Explain serialization and deserialization.
