

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.C.A. - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - II

**24UACT2003 - Python Programming**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

**Section B**

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

1. Explain different types of operators and their precedence in Python.
2. Write a Python program to check if a given string is a palindrome.
3. Discuss the scope and lifetime of variables in Python functions.
4. Compare lists and dictionaries with suitable examples.
5. Explain the use of the NumPy module for handling arrays.
6. Implement a program to read and write CSV files in Python.
7. Write a Python program to demonstrate the try-except-finally block.
8. Evaluate the use of histograms and pie charts in data visualization.

**Section C**

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

9. Explain the structure of a Python program with an example.
10. Compare different control flow statements in Python with examples.
11. Justify the importance of user-defined modules and packages in Python.
12. Analyze different file-handling techniques in Python, including binary files.
13. Compare various 2D and 3D data visualization techniques in Python.

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