

Roll.No.

25UACT1001

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 - NOVEMBER 2025
SEMESTER - I

25UACT1001 - Python Programming

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Describe the different types of operators in Python with examples.
2. Illustrate type conversion between numeric and string data types using examples in Python.
3. Classify various loop control statements such as break, continue, pass and exit in Python.
4. Apply a while loop to compute the sum of digits of a number using Python.
5. Explain the use of default arguments in a function with an example using Python.
6. Compute the total and average of marks stored in a list using NumPy functions.
7. Apply list methods to add and remove elements from a list using Python.
8. Examine a python program with try-except blocks to handle division by zero and file-not-found errors.

Section C

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

9. Apply string slicing to extract the first three and last three characters of a given string.
10. Illustrate nested loops by printing a multiplication table from 1 to 5.
11. Assess the efficiency of using a lambda function to sort a list of tuples by the second element.
12. Demonstrate merging two dictionaries and updating keys with new values using Python.
13. Evaluate the sales data from a CSV file to identify trends, highest and lowest sales values, and recommend strategies to improve low-performing months.
