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. M.Sc.(Appl.Maths) END SEMESTER EXAMINATIONS NOVEMBER - 2023 SEMESTER - III **20PAMET3003 - Python Programming** 

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

## Section B

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

- 1. Describe the Applications Basics of Python Programming Using the REPL(Shell).
- 2. Explain the concept of control flow in Python programming.
- 3. Prepare a Python program that accomplishes the following tasks efficiently using lists and relevant methods.

Computes the sum of all the integers in the list.

Classify the integers in the list into two categories: even and odd.

- 4. Explain the concept of functions in Python programming.
- 5. Describe the Python DB-API and its role in database connectivity.
- 6. Write a step by step process to read excel data using python using pandas and openpyxl
- 7. Compare Python's approach to Database Programming with that of other programming languages.
- 8. Differentiate between global and local variables. Give example.

## Section C

- I Answer any **TWO** questions  $(2 \times 10 = 20 \text{ Marks})$
- 9. Write a program to find sum of n integer values.
- 10. Explain about Built-in data structures with example.
- 11. Explain various operators with each contains an example program.
- 12. Explain about Object Relational Manager's Function in Python Programming.

II - Compulsory question  $(1 \times 10 = 10 \text{ Marks})$ 

13. Write a Python Program for setting the values like name, age and if age reaches 65 display the names in that file.

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