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.AI - END SEMESTER EXAMINATIONS - NOV'2024 SEMESTER - II 22UAICT2002 - Problem Solving Using Python

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

- 1. What is computational problem solving? Why is it important in computer programming?
- 2. What are literals in Python? Give examples of different types of literals.
- 3. Describe how multi-way selection can be implemented using if, elif, and else statements. Give a basic example.
- 4. Compare and contrast definite and indefinite loops.
- 5. How do you define a function in Python? Give a simple example.
- 6. Explain how keyword arguments work in Python functions. How do they enhance the readability of code?
- 7. Describe how Turtle Graphics can be used to create drawings in Python. Give an example.
- 8. Explain how sets can be useful for handling unique items in a python program.

Section C

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

- 9. Discuss the different types of operators in Python and give an examples.
- 10. Examine the features of lists in Python with example.
- 11. Compare and contrast different methods of parameter passing in Python with examples.
- 12. Analyze the difference between built-in modules and user-defined modules in Python with example.
- 13. Discuss about inheritance in Python. How can it simplify code and make it more reusable?
