22UDSCT1001

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.(DS) - END SEMESTER EXAMINATIONS APRIL-2023 SEMESTER - I 22UDSCT1001 - Introduction to Data Science

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

- 1. What is Data? List the various types of data.
- 2. Describe the concept of dictionaries in python with example.
- 3. Relate the features of Numpy and Pandas libraries in python.
- 4. Sketch the steps to plot a graph with labels, color, legends using matplotlib package for any dataset.
- 5. Illustrate the concept of functions in python with an example.
- 6. Prepare the list of various string processing methods available in python with examples.
- 7. Show the various statistical functions available in python.
- 8. Define Data Visualization. Differentiate the various graphs available in seaborn package.

Section C

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

- 9. Define Big data. Explain the various characteristics of Big data.
- 10. Classify the various control statements in python with examples.
- 11. Distinguish the list and tuple data types with examples.
- 12. Apply the creation and manipulation of data frames to any real dataset.
- 13. Assess the various methods available in Matplotlib package with examples.
