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.(Computer Science) END SEMESTER EXAMINATIONS NOVEMBER - 2023 SEMESTER - II

## 20PCSCT2006 - Data Science Using Python

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

## Section B

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

- 1. Explain Lists and Tuples in detail.
- 2. Describe Histograms.
- 3. Classify the categories of Machine learning.
- 4. Explain about Decision Trees.
- 5. List and explain the different datatypes in Python.
- 6. Relate the concept of General Matplotlib tips.
- 7. Illustrate about Bayesian Classification.
- 8. Determine the K-means clustering algorithm.

## Section C

I - Answer any **TWO** questions  $(2 \times 10 = 20 \text{ Marks})$ 

- 9. Illustrate the various looping statements in Python with an example.
- 10. Relate the basics of Numpy Arrays.
- 11. Examine Visualizing errors in detail.
- 12. Evaluate the concept of Simple Linear regression.

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

13. Determine the Principle component analysis.

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