#### 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. - END SEMESTER EXAMINATIONS APRIL - 2022 SEMESTER - II 20PCSCT2006 - Data Science Using Python

Total Duration : 3 Hrs.

Total Marks : 60

### Section A

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

- 1. Apply the basics of Python like variables, operators in simple Python program.
- 2. Apply various Histograms in python code.
- 3. Describe Bayesian classification.
- 4. Explain K-means Clustering.
- 5. Relate data manipulation with pandas in python code.
- 6. Prepare simple scatter plot in python.
- 7. Apply simple linear regression in code.
- 8. Examine Principal component analysis.

## Section B

# Part A

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

- 9. Describe Conditionals and loops with example code.
- 10. Substitute Data Indexing & Selection in python program with necessary syntax and code.
- 11. Prepare Simple line plots with your own data and explain it with python code.
- 12. Examine SVM with example code.

#### Part B

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

13. Diagnose simple weather report using Decision trees.

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