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 EXAMINATION APRIL/NOV - 2021
SEMESTER - I
20PCSET1001 - Introduction to Machine Learning

Total Duration : 3 Hrs		**Total Marks : 75**	
MCQ	: 30 Mins	MCQ	: 15
Descriptive	: 2 Hrs.30 Mins	Descriptive	: 60

Section B

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

1. Discuss about various Applications of Machine Learning Algorithms.

2. Describe Multivariate Data and tuning complexity.

3. Explain Clustering in detail.

4. Define Association rules and explain with an example.

5. Discuss about dimensionality Reduction.

6. Diagnose the pros and cons of Clustering and Classification.

7. Differentiate between Supervised and Un-supervised Algorithms.

8. Illustrate Back Propagation Algorithm with Suitable example.

Section C

Part A

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

9. Explain Classification and Regression with suitable example.

10. Discuss about advantages and disadvantages of various non-Parametric methods.

11. How will calculate maximum likelihood? Illustrate with an example.

12. Explain Multilayer perceptron in detail.

Part B

Compulsory question $(1 \times 10 = 10$ Marks$)$

13. Write about Decision Trees and illustrate with suitable example.