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 NOVEMBER - 2022 SEMESTER - III 20PBSCT3010 - Machine Learning Techniques

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

- 1. Define Grouping and Grading.
- 2. Brief Multilayer Perceptron.
- 3. Explain Applications of Machine Learning.
- 4. What is Machine Learning?
- 5. Describe Probably Approximately Correct Learning.
- 6. Explain in detail market basket analysis problem.
- 7. Explain in detail FP growth.
- 8. Define support and confidence in Association rule mining.

Section B

Part A

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

- 9. Explain the components of learning.
- 10. Describe in detail about Mining Frequent item sets with Candidate Generation.
- 11. Describe the Perspective and Issues in Machine learning.
- 12. Consider the database has ten transactions. Let min_sup =20%

TID	T1	T2	Т3	T4	T5	T6	T7	T8	Т9	T10
List of Items	11,12,15	12,14	12,13	11,12,14	11,13	12,13	11,13	11,12,13,15	1, 2, 3	11,12
	-									

Diagnose the frequent patterns and Draw FP tree for the given database.

Part B

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

13. Explain various models to improve the efficiency of Aprior Algorithm.

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