Experiment No. : ..... Roll No.: .....

Date : .....

• Viva Questions :-

(Q1) State the Apriori law or property. How does apriori algo be significantly used for data mining application?

→ Apriori property :- "All non-empty subsets of a frequent itemset must also be frequent".

→ Significance :- used to discover frequent itemsets & generate association rules in large datasets, aiding in market basket analysis, recommendation system etc.

(Q2) Enlist the limitations of the Apriori Algo ~~work~~ worst implementation on huge datasets for data mining.

→ high computational cost for large datasets.

→ Generates numerous candidate itemsets, ↑ memory usage

→ Inefficient with low support threshold due to excessive iterative

→ Slow with dense or high-dimensional datasets.

Roll No.:

Date : 2/1/25

Experiment :- 03

- **Objective :-** Demonstrate of association rule using any dataset using Apriori algo in weka explorer.
- **Theory :-** Association rules mining method for determing frequent itemsets and Association rule.
- **Steps :-** ① Create itemsets starting from 1 element in each, till all the possible itemsets are considered.

② Remove those itemsets having support count and confidence less than the threshold.

③ In the last step, itemsets with max possible elements will be the frequent itemset.

④ from the frequent itemsets, determine the association rule by computing confidence for each possible Association rule & consider only those with confidence value more than the threshold.

- **Result :-** In this experiment have seen the total rules generated theoritically and by the weka are matching, hence the rules generated are 5.

EXPERIMENT 3