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SECTION – A (4X15=60 Marks)
Answer ALL Questions

1. a) Explain with a neat diagram the three-tier architecture of a Data Warehouse   7M
   b) Explain the OLAP operations in a Multidimensional data.   8M
   Or
   c) Why do we pre-process data? Explain different techniques in data cleaning, integration
      and transformation   15M

2. a) Data Mining should be applicable to any kind of data repositories, including data
      streams. What are the different kinds of data on which mining can be applied?   10M
   b) Mention different issues in Data Mining.   5M
   Or
   c) Explain in detail how the data is measured differently in statistical descriptions   8M
   d) Where can data mining be applied? Explain different domains of applications   7M

3. a) Explain FP-Growth Algorithm with an example.   8M
   b) Explain AOI Algorithm.   7M
   Or
   c) Explain Apriori property and explain the algorithm associated with it   8M
   d) How to generate Closed and Max patterns   7M

4. a) What is the difference between classification and Prediction? How a decision tree is
      constructed   10M
   b) Explain Support Vector Machines concept   5M
   Or
   c) Explain Bayesian Classification Methods. How Classification by back propagation is
      obtained   7M
   d) Explain k-means Clustering and compare that with k-medoids algorithm   8M

SECTION – B (5X3=15 Marks)
Answer any FIVE Questions

5. **Write a Short note on**
   a) DBSCAN Algorithm
   b) Tree Pruning
   c) Concept Description.
   d) Frequent Item sets using vertical data format
   e) Multilevel Association Rules
   f) Data Visualization
   g) Similarity and Dissimilarity of data
   h) Data Cube Technology