



Tribhuvan University  
Institute of Science and Technology  
2069



Bachelor Level/Fourth Year/Eighth Semester/Science  
**Computer Science and Information Technology**  
**(CSc. 451 – Data Warehousing and Data Mining)**

Full Marks: 60  
Pass Marks: 24  
Time: 3 hours.

*Candidates are required to give their answer in their words as far as practicable.*  
The figures in the margin indicate full marks.

**Group A**

**Attempt any two questions.**

**(10×2=20)**

1. Explain the architecture of data mining system with block diagram.
2. Define clustering. Explain with example of the partitioning and hierarchical methods.
3. Explain the architecture and implementation of data warehouse with example.

**Group B**

**Attempt any eight questions. (Question No. 13 is compulsory)**

**(8×5=40)**

4. What do you mean by knowledge discovery in database (KDD)?
5. Explain the application of data warehouse and data mining.
6. Differentiate between OLAP and OLTP.
7. Explain the data mining techniques.
8. Explain the apriori algorithm.
9. Explain the K-Medoids algorithm.
10. Mention the spatial database and its features.
11. What is data cube? Explain with example.
12. Explain the data mining languages.
13. Write short notes (**any two**):
  - a) OLAP queries
  - b) Snow flakes
  - c) K-mean
  - d) Mining text databases