

**CSE 703 - Data Warehousing and Mining**

P. Pages : 1

Time : Three Hours



**GUG/W/16/6605**

Max. Marks : 80

- Notes :
1. All questions carry equal marks.
  2. Illustrate your answers wherever necessary with the help of neat sketches.
  3. Due credit will be given to neatness and adequate dimensions.
  4. Assume suitable data wherever necessary.

1. a) What is Dataware house ? Differentiate operational database system and data warehouses. 8  
b) Draw and explain the Architecture of data warehouse. 8

**OR**

2. a) How are concept hierarchies useful in OLAP ? Explain OLAP operations with example. 8  
b) How data warehouse is used for processing of an information explain ? 8
3. a) What is concept of data mining ? What are the steps in process of knowledge discovery. 8  
b) What are the major issues in data mining. 8

**OR**

4. a) Compare the following. 9  
i) Discrimination and classification.  
ii) Characterization and clustering  
iii) Classification and regression.  
b) Explain different applications of data mining. 7
5. a) What are the major tasks in data preprocessing. Explain in detail. 8  
b) What is data cleaning explain methods of data cleaning. 8

**OR**

6. a) Explain any four data reduction techniques. 8  
b) What is the need of data transformation ? Explain data transformation strategies. 8
7. a) Discuss various issues regarding classification and prediction. 8  
b) What is decision tree ? Write algorithm for decision tree induction. 8

**OR**

8. Discuss about single dimensional, multilevel and multidimensional association rules of mining for transactional databases. 16
9. a) What is cluster analysis ? What are the requirements of cluster analysis. 8  
b) Explain following partitioning methods. 8  
i) k-mean (centroid based)  
ii) k-medoids (object based)

**OR**

10. a) Explain Agglomerative and divisive hierarchical clustering. 8  
b) Write a note on "Outlier analysis with example.". 8

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