# **Dronacharya College of Engineering, Gurgaon**

# **Department of Electronics and Computers Engineering**

## Session 2014-2015

**Subject:** Data Warehousing and Data Mining

Semester: VII/ Branch: ECS

# **Assignment - Section A**

- 1. How is a data warehouse different from a database?
- 2. What are facts?
- 3. What is apex cuboid?
- 4. List out the components of star schema
- 5. What is snowflake schema?
- 6. List out the components of fact constellation schema?

# **Assignment - Section B**

- 1. What are the factors involved while choosing data mining system?
- 2. Define visual data mining
- 3. What does audio data mining mean

Discuss the components of data warehouse

## Assignment - Section C

- 1. What is data transformation? Why it is essential in the form of KDD? Give example
- 2. State why preprocessing an important issue for data warehousing and mining
- 3. What do data mining functionalities include?
- 4. Define Data Integration.
- 5. List the primitives that specify a data mining task
- 6. List the steps involved in the class comparison procedure
- 7. What are the uses of statistics in data mining?

## Assignment - Section D

- 1. Explain the smoothing Techniques?
- 2. Explain the classifications of Data mining system.
- 3. .Describe challenges to data mining regarding data mining methodology and user interaction issues.
- 4. .Describe challenges to data mining regarding performance issues.
- 5. Describe issues relating to the diversity of database types.
- 6. Define Association Rule Mining
- 7. When we can say the association rules are interesting?
- 8. Explain Association rule in mathematical notations.
- 9. Define support and confidence in Association rule mining.

### **Important Questions - Section A**

- 1. Write short notes on multidimensional data model?
- 2. Define data cube?
- 3. What are dimensions? Dimensions are the entities
- 4. Define dimension table
- 5. Define fact table?
- 6. What are lattice of cuboids?

#### **Important Questions - Section B**

- 1. List out the OLAP operations in multidimensional data model?
- 2. What is pivot operation?
- 3. List out the views in the design of a data warehouse?
- 4. What are the methods for developing large software systems?
- 5. Define MOLAP?
- 6. Define HOLAP?

### **Important Questions - Section C**

- 1. Define data discretization.
- 2. What are the types of data pre-processing techniques? Explain in detail about them?
- 3. Explain Data Discretization and Concept Hierarchy Generation

- 4. What are the things suffering the performance of Apriori candidate generation technique.
- 5. Describe the method of generating frequent item sets without candidate generation.4
- 6. Define Iceberg query
- 7. Mention few approaches to mining Multilevel Association Rules

### **Important Questions - Section D**

- 1. How are association rules mined from large databases?
- 2. Describe the different classifications of Association rule mining.
- 3. What are multidimensional association rules?
- 4. Define constraint-Based Association Mining.
- 5. What is Decision tree?
- 6. What is Attribute Selection Measure?
- 7. Describe Tree pruning methods.
- 8. Define the concept of prediction.
- 9. What do you mean by Cluster Analysis?
- 10. What are the fields in which clustering techniques are used?
- 11. Define CLARA and CLARANS

### **Short Answer Questions - Section A**

- 1. Define data warehouse?
- 2. What are operational databases
- 3. Define OLTP?
- 4. Define OLAP?
- 5. How a database design is represented in OLTP systems
- 6. How a database design is represented in OLAP systems?

### **Short Answer Questions - Section B**

- 1. How the operation is performed in waterfall method?
- 2. List out the steps of the data warehouse design process
- 3. Define ROLAP.

## **Short Answer Questions - Section C**

- 1. Define Data mining
- 2. Give some alternative terms for data mining
- 3. What is KDD?
- 4. What are the steps involved in KDD process.
- 5. What is the use of the knowledge base?
- 6. What is the purpose of Data mining Technique?
- 7. How to generate association rules from frequent item sets?

Give few techniques to improve the efficiency of Apriori algorithm

## **Short Answer Questions - Section D**

- 1. Define Genetic algorithm.
- 2. .Define Predictive model
- 3. Data mining tasks that are belongs to predictive model
- 4. Define descriptive model
- 5. Define the term summarization
- 6. List out the advanced database systems.
- 7. Define cluster analysis