

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER-IV • EXAMINATION – WINTER 2017

Subject Code: 2640005**Date: 06/01/2018****Subject Name: Data Warehousing and Data Mining (DWDM)****Time: 02:30 PM to 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Define and explain the following terms. **07**
- i. Data Mart
 - ii. Virtual Warehouse
 - iii. Data Sources
 - iv. Snowflake Schema
 - v. Smoothing
 - vi. Clustering
 - vii. Bitmap indexing
- (b)** i. Define Data Warehousing. And explain the key Features of Data Warehousing. **05**
 ii. Define Full Forms: 1) ETL 2) AOI **02**
- Q.2 (a)** What is multidimensional data analysis? Explain its techniques. **07**
- (b)** Explain KDD process with its steps. **07**
- OR
- (b)** Compare between OLTP & OLAP. **07**
- Q.3 (a)** Discuss the various ways of handling missing value during data cleaning. **07**
- (b)** Explain with figure: 3-Tire Data Warehouse Architecture. **07**
- OR
- Q.3 (a)** List and describe the primitives for specifying a data mining task. **07**
- (b)** What is Apriori Property? Explain Apriori algorithm. **07**
- Q.4 (a)** State and explain the Bayesian classification. **07**
- (b)** Explain the various methods which evaluate the accuracy of a classifier or a predictor. **07**
- OR
- Q.4 (a)** What is decision tree? Describe tree pruning methods. **07**
- (b)** List and explain describe major issues in data mining. **07**
- Q.5 (a)** Discuss the application of Data Mining in Retail Industry. **07**
- (b)** What all features should a good data mining system include? **07**
- OR
- Q.5 (a)** How the data mining will be used in the telecommunication industry. **07**
- (b)** What are the techniques used in data reduction? Explain one of them in detail. **07**
