

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII EXAMINATION – WINTER 2015

Subject Code: 171601**Date: 12/12/2015****Subject Name: Data Warehouse and Data Mining****Time: 10:30am to 1:00pm****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) Draw and explain the data warehouse architecture. **07**
(b) What is OLAP? Give the difference between OLAP and OLTP. **07**

- Q.2** (a) What do you mean by data mart? What are the different types of data mart? **07**
(b) List out the different schema of data warehouse and explain one of the data warehouse schemas in detail with suitable diagram. **07**

OR

- (b) Explain detail about OLAP servers. **07**

- Q.3** (a) Draw and explain the data mining architecture. **07**
(b) What is data cleaning? Describe the different methods of handling missing values during data cleaning. **07**

OR

- Q.3** (a) Explain the major issues in data mining. **07**
(b) What is data transformation? Explain the different data transformation approaches for transforming data. **07**

- Q.4** (a) Describe the various criteria for the classification of frequent pattern mining. **07**
(b) Explain the following as attribute selection measure: **07**
(i) Information Gain
(ii) Gain Ratio

OR

- Q.4** (a) Write and explain the algorithm for mining frequent itemsets without candidate itemsets generation with suitable example. **07**
(b) Explain the various methods which evaluate the accuracy of a classifier or a predictor. **07**

- Q.5** (a) Explain the typical requirements of clustering in data mining. **07**
(b) Write a short note on Web mining. **07**

OR

- Q.5** (a) Describe and explain the different types of clustering methods. **07**
(b) Write a short note on text mining. **07**
