Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII • EXAMINATION – WINTER 2013

Subject Code: 171601 **Date: 26-11-2013**

Subject Name: Data Warehousing and Data Mining

Time: 10:30 TO 01:00 **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 Data Mining. Explain various application area of Data Mining Techniques and Knowledge Discovery Process in brief.	**07**
	(b)	Explain Data Cube with all OLAP Operations in brief.	**07**
Q.2	**(a)**	Explain Following: 1. Binning method 2. How to handle missing values in Data Set.	**07**
	(b)	Explain Three tier architecture of Data WareHouse.	**07**
		OR	
	(b)	Explain Star, Snowflake, Fact Constellation Schema for Multidimensional Database.	**07**
Q.3	**(a)**	Explain Data Discretizaion and Concept Hierarchy Generation in brief.	**07**
	(b)	Explain Market Basket Analysis with it's use and Association Rules in brief.	**07**
		OR	
Q.3	**(a)**	Explain Apriori Algorithm for finding Frequent Item-sets.	**07**
	(b)	Explain Classification with Decision Tree Induction method.	**07**
Q.4	**(a)**	Explain Baye's Theorm and Naïve Bayesian Classification.	**08**
	(b)	Differentiate Classification and Clustering.	**06**
		OR	
Q.4	**(a)**	Explain Outlier Analysis Techniques.	**07**
	(b)	Explain use of Data Mining techniques in Web/Internet Technology.	**07**
Q.5	**(a)**	Explain Following terms: 1. Information Gain 2. Mean, Median, Mode.	**07**
	(b)	Explain Linear Regression with example.	**07**
		OR	
Q.5	**(a)**	Explain k-means and k-medoids algorithm for clustering.	**08**
	(b)	Explain mining in following Databases with example. 1. Temporal Databases 2. Sequence Databases 3. Spatial Databases and Saptiotemporal Databases.	**06**

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