Seat No.:	Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- I (New course) • REMEDIAL EXAMINATION - SUMMER 2015

Subject Code: 2712309 Date:16/05/2015

Subject Name: Data Mining

Time: 10:30 am to 1:00 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) (b)	Explain data mining task primitive. Explain star schema and snowflake schema.		
	Q.2	(a)	What is noise? Describe the reasons for noisy data. What are the different techniques to remove the noise from data?		
		(b)	 Explain methods for data normalization. 	03	
			Explain concept hierarchy with example. OR	04	
		(b)	1. Explain different types of sampling techniques used for data reduction.	03	
			2. Explain different types of histogram.	04	
	Q.3	(a)	What is market basket analysis? What are the different applications of it?		
	0	(b)	Apply apriory algorithm on the given data. Min support = 50% Min confidence = 70%	07	
			TID Items		
			100 1.3,4		
			200 2,3,5		
			300 1,2,3,5		
			400 2,5		
			OR		
	Q.3	(a)	Differentiate between Operational Database System and Data Warehouse.	07	
		(b)	Discuss the techniques to improve efficiency of apriory algorithm.	07	
	Q.4	(a)	Describe an algorithm ID3, for constructing decision tree.	07	
		(b)	Discuss the issues regarding classification and prediction.	07	
			OR		
	Q.4	(a)	Explain Linear Regression with the help of suitable example.	07	
		(b)	Explain Bayesian classification with example.		
	Q.5	(a)	What is web usage mining? Explain activities of web usage mining.		
		(b)	Write a short note on click stream mining.	07	
			OR		
	Q.5	(a)	Explain how data mining is applicable for Fraud Detection.	07	
		(b)	Explain a method of mining spatial data.	07	
