

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER VIII • EXAMINATION – SUMMER - 2013****Subject code: 183103****Date: 09-05-2013****Subject Name: Business Intelligence & Data Mining****Time: 10:30 pm to 01:00 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) Explain process of Knowledge Discovery. **07**
 (b) Explain differences between operational database systems and data warehouse **07**

- Q.2** (a) Explain three tier Data Warehousing Architecture. **07**
 (b) What is Business Intelligence and How it is related to Data Mining. **07**

OR

- (b) Explain Different OLAP Operations on Multidimensional Data. **07**

- Q.3** (a) What is classification and prediction? Explain issues regarding classification and prediction. **07**
 (b) Explain Apriori Algorithm in Detail. Find All Frequent Item set using Apriori Algorithm.(Take minimum support count 2) **07**

TID	ITEMS
T001	I1, I3, I4
T002	I2, I3, I5
T003	I1, I2, I3, I5
T004	I2, I5

OR

- Q.3** (a) Explain Algorithm to find Frequent itemset without generating candidate set . **07**
 (b) Explain Data Mining Functionalities. **07**

- Q.4** (a) Explain : Data warehouse, Frequent itemset, Minimum support count **07**
 (b) Write down Applications of Business Intelligence. **07**

OR

- Q.4** (a) Answer the following questions : **07**
 i. How data warehouse is different from database. How they are similar?
 ii. What are the similarities and differences between Concept Description and OLAP.
 iii. Explain Supervise and unsupervised learning using example .
 (b) Explain prepruning and postpruning in Decision tree Induction. Why it is Require? **07**

- Q.5 (a)** Explain Data Mining Issues Related to Performance & Diversity of Data types. **07**
- (b)** Explain Bayesian classification and Rule based Classification. **07**
- OR**
- Q.5 (a)** Explain linear regression and non linear regression using example. **07**
- (b)** Write Short note on ARCS . **07**
