

GUJARAT TECHNOLOGICAL UNIVERSITY**ME – SEMESTER –II-(Old) EXAMINATION – SUMMER 2019****Subject Code: 2720209****Date: 10/05/2019****Subject Name: Data Mining and Data Warehousing****Time: 10:30 AM 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) What is Data Mining? Explain Data mining as one step of Knowledge Discovery Process. **07**
(b) Explain Data Mining Issues Related to Performance & Diversity of Data types. **07**
- Q.2** (a) Explain with suitable example Chi-square correlation test for Nominal Data. **07**
(b) Discuss various OLAP operations in the multidimensional data model with example. **07**
- OR**
- (b) Give the difference between **07**
A. Discrimination and Classification.
B. Characterization and Clustering.
C. Classification and Prediction.
D. Classification and Clustering.
- Q.3** (a) Explain three tier Data Warehousing Architecture. **07**
(b) Describe any two hierarchical methods of cluster analysis in detail. **07**
- OR**
- Q.3** (a) What are the different types of multidimensional schemas? Explain any one schema in detail with proper diagram **07**
(b) Define: characterization, discrimination, association, correlation, classification, prediction, evolution analysis. **07**
- Q.4** (a) Explain outlier analysis with suitable example and algorithm. **07**
(b) What is an attribute selection measure? Explain different attribute selection measure with example. **07**
- OR**
- Q.4** (a) Explain FP growth to generate frequent item set using specific example. **07**
(b) Explain prepruning and postpruning in Decision tree Induction. Why it is Require? **07**
- Q.5** (a) How does classification and prediction help in mining multimedia data? **07**
(b) What is density-based method in clustering? Explain in details about DBSCAN. **07**
- OR**
- Q.5** (a) Write a short note on Web Mining. **07**
(b) Why naïve Bayesian classification is called “naïve”? Briefly outline the major idea of naïve Bayesian classification. **07**
