GUJARAT TECHNOLOGICAL UNIVERSITY
M.SC(IT)- INTEGRATED – SEMESTER V- EXAMINATION –WINTER-2024

Subject Code:1350503   **Date: 25/11/2024**
Subject Name: Data Warehouse and Mining
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.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

			Marks
Q.1	**(a)**	Define and explain Data warehouse.	03
	(b)	Explain ELT Architecture.	04
	(c)	Explain knowledge discovery from data(KDD) process.	07
Q.2	**(a)**	What are the types of data?	03
	(b)	Explain the data mining functionalities.	04
	(c)	Discuss major issues in Data Mining.	07
		OR	
	(c)	Draw and explain the data mining architecture.	07
Q.3	**(a)**	Describe the different classifications of Association rule mining.	03
	(b)	What is meant by multidimensional association rules?	04
	(c)	Decision Tree Induction with example.	07
		OR	
Q.3	**(a)**	What is meant by association rule?	03
	(b)	How the classification is differs from the prediction? Explain phases of classification.	04
	(c)	Explain linear regression in detail.	07
Q.4	**(a)**	Define and explain classification.	03
	(b)	Differentiate supervised and unsupervised learning.	04
	(c)	Brief on Neural Network prediction method.	07
		OR	
Q.4	**(a)**	Define DBSCAN and STRING.	03
	(b)	Differentiate classification and prediction.	04
	(c)	Explain Logistric regression with example.	07
Q.5	**(a)**	Define weblog structure.	03
	(b)	Explain web usage mining.	04
	(c)	Discuss the K-means clustering algorithm using examples	07
		OR	
Q.5	**(a)**	What do you mean by outliner analysis?Explain.	03
	(b)	Explain web content mining.	04
	(c)	What do you meant by Clustering? Explain the requirements used in Clustering?	07