

Reg.No.:



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN  
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]  
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

**Question Paper Code : 60006**

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – NOV. / DEC. 2024

Fifth Semester

Information Technology

U19IT513 – DATA WAREHOUSING AND DATA MINING

(Regulation 2019)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	Define term a Data warehouse.	2	K1	CO1
2.	What is mean by metadata and how is it useful?	2	K2	CO1
3.	What is data mining?	2	K1	CO2
4.	Mention the different kinds of data.	2	K1	CO2
5.	How is the data cleaning done in the preprocessing?	2	K3	CO3
6.	What is data reduction?	2	K1	CO3
7.	Define association rule.	2	K2	CO4
8.	List the Apriori property.	2	K2	CO4
9.	Define Data classification.	2	K1	CO5
10.	What are the requirements of clustering?	2	K2	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	Discuss about OLAP operations in the multidimensional data model.	13	K2	CO1
	(OR)			
b)	Explain the Three-Tier Data Warehouse Architecture with neat diagram.	13	K2	CO1
12. a)	Explain various data mining functionalities with an example.	13	K2	CO2
	(OR)			
b)	With diagrammatic illustration, explain the steps involved in the process of the Knowledge Discovery from Data.	13	K2	CO2
13. a)	i. Identify the Issues to be considered during Data Integration	6	K2	CO3
	ii. Discuss about detecting data redundancy using correlation analysis.	7	K3	
	(OR)			
b)	Explain in details about data transformation method with suitable example.	13	K2	CO3
14. a)	Discuss in detail about Maximal Frequent Item Set and closed frequent item set with an example.	13	K2	CO4
	(OR)			
b)	Explain the Multidimensional Association mining with an example.	13	K3	CO4
15. a)	Explain partitional clustering method with an example.	13	K2	CO5
	(OR)			
b)	Discuss the Naïve Bayesian Classification Algorithm in detail.	13	K3	CO5

PART – C

(1 x 15 = 15 Marks)

Q.No.	Questions	Marks	KL	CO
16. a)	Explain the Apriori Algorithm with an example. Consider the following data set to generate Association rules {M,O,N,K,E,Y} {D,O,N,K,E,Y} {M,A,K,E} {M,U,C,K,Y} {C,O,O,K,I,E}, Support= 60 %, Confidence = 80 %.	15	K3	CO4
	(OR)			
b)	Discuss the Metadata repository and Back-end tools used in Data Warehouse Architecture in detail.	15	K2	CO1