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Question Paper Code :

**ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES**

(AUTONOMOUS)

M.Tech II-Semester Regular Examinations, May 2016

**Data Ware Housing & Data Mining**

(Computer Science & Technology)

Date:

Time: 3 hours

Max Marks: 60

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Answer ONE Question from each unit

All questions carry equal marks

All parts of the question must be answered at one place only

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**UNIT-I**

1. (a) Differentiate operational database systems and data warehousing. (4M)  
(b) Explain data mining as a step in the process of knowledge discovery (8M)

**OR**

2. (a) Differentiate OLTP and OLAP. (4M)  
(b) Discuss how computations can be performed efficiently on data cubes. (8M)

**UNIT-II**

3. (a) What are the criteria for the classification of frequent pattern mining? (4M)  
(b) With suitable example explain the generation of frequent item sets using Apriori algorithm (8M)

**OR**

4. (a) List and describe any four primitives for specifying data mining tasks. (4M)  
(b) Describe why concept hierarchies are useful in data mining (8M)

**UNIT-III**

5. (a) Describe in detail the Apriori algorithm with suitable example (4M)  
(b) Discuss various methods in data cleaning process (8M)

**OR**

6. (a) Discuss about association rule mining (4M)  
(b) Define multidimensional association rule. Discuss mining distance based association rules (8M)

**UNIT-IV**

7. (a) State Bayes theorem and discuss how Bayesian classifier works. (4M)  
(b) Give k-means partitioning algorithm. What is outlier analysis. (8M)

**OR**

8. (a) Explain classification by Decision tree induction with example. (4M)  
(b) Illustrate how support vector machines can be used for classification of data. (8M)

**UNIT-V**

9. (a) Discuss model based clustering methods (4M)  
(b) Explain Grid based methods for clustering (8M)

**OR**

10. (a) What are the fields in which clustering techniques are used ? What are the requirements of cluster analysis? (4M)  
(b) Write sort notes on clustering methods (8M)

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