ANNA UNIVERSITY COIMBATORE

B.E. / B.TECH, DEGREE EXAMINATIONS: MAY / JUNE 2010

REGULATIONS - 2007

SIXTH SEMESTER

070230060 - DATA WAREHOUSING AND MINING

(COMMON TO CSE / IT)

TIME: 3 Hours Max.Marks: 100

PART - A

 $(20 \times 2 = 40 \text{ MARKS})$

ANSWER ALL QUESTIONS

- 1. What is a data warehouse?
- Differentiate fact table and dimension table.
- 3. Briefly discuss the schemas for Multidimensional Databases.
- Compare OLTP and OLAP.
- List the issues to be considered during Data Integration.
- 6. Write the strategies for data reduction.
- 7. Why is it important to have data mining query language?
 - Write the syntax for characterization.
- 9. List the techniques to improve the efficiency of Apriroi algorithm.
- 10. Define support and confidence.
- 11. What is FP growth?
- How meta rules are useful in Constraint-based association mining.
- 13. What is Bayesian theorem?
- 14. Why is tree pruning useful in decision tree induction?
- 15. Give the difference between agglomerative and divisive hierarchical clustering.
- 16. Define Outliers I
 - Define Outliers. List various outlier detection approaches.
- 17. List out the methods for information retrieval.
- ✓ 18. What is Web usage mining?

- Give some applications of data mining.
- 20. What is a time-series database?

PART - B

 $(5 \times 12 = 60 \text{ MARKS})$

6

ANSWER ANY FIVE QUESTIONS

- 21. Describe the data warehouse architecture with a neat diagram.
- 22. Explain the steps involved in Attribute-Oriented Induction for Data Characterization.
- 23. Discuss how Apriori algorithm is used to find frequent itemsets with an example.
- 24. How does data classification work? Discuss the major steps of back propagation algorithm with an example.
- 25. What is clustering? List the types of clustering techniques and discuss the Partitioning methods in detail.
- 26. Describe the various data mining primitives for specifying a data mining task.
- 27. a) List out the various issues to be considered in data mining.
 - b) Describe how to evaluate the accuracy of the classifier and increase the 6 classifier accuracy.
- 28. What is Web mining? Explain how to identify authoritative web pages and automatic classification of web documents.

****THE END****