

AQ-2786

Faculty of Engineering & Technology
M.E. Semester—II [Full Time] Information Technology (C.G.S.) Examination
DATA WAREHOUSING AND DATA MINING.
Elective—II
Paper—2 NMEF 5

Time : Three Hours]

[Maximum Marks : 80

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry marks as indicated.
 - (2) Assume suitable data wherever necessary.
 - (3) Use pen of Blue/Black ink/refill only for writing the answer book.
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1. (a) What is data granularity ? Explain with the help of an example. Also mention its pros and cons. 7
 - (b) Differentiate between operational systems and decision support systems. 6
- OR**
2. (a) Explain the defining features of data warehouse. 7
 - (b) What is strategic information ? Explain it with suitable example. 6
3. (a) Explain how data warehouse differs from data mart. 6
 - (b) Explain the fact table in detail. 7
- OR**
4. (a) Explain the characteristics and goals of data warehouse architecture. 6
 - (b) Why is meta data essential for IT ? List six processes in which meta data is significant for IT and explain why ? 7

5. (a) Explain OLAP in data warehouse. 7
(b) Explain the concept of data clustering. 7

OR

6. (a) What do you mean by surrogate keys ? Why are they important in data warehouse environment ? 7
(b) What are different models of OLAP ? Differentiate between MOLAP and ROLAP. 7
7. (a) What is class/concept description ? Explain characterization and discrimination. 7
(b) Explain the Knowledge Discovery Process. 7

OR

8. (a) What kinds of patterns can be mined under data mining tasks ? 7
(b) Explain major issues in data mining. 7
9. (a) Explain the concept of Market Basket Analysis. 7
(b) Explain mining multiple level association rules in databases with an example. 6

OR

10. (a) Explain how Apriori property is used in the algorithm. 7
(b) Explain constrained based association rules. 6
11. (a) Explain the Back propagation algorithm. 7
(b) Explain the basic algorithm for inducing a decision tree from training tuples. 6

OR

12. (a) Explain the working of Naive Bayesian classification. 7
(b) What are the steps and issues in preparing data for classification and prediction data cleaning ? 6