Roll No. ....
Printed Pages : 2

BT-6 / M-18

ADVANCED DATABASE SYSTEM
Paper–CSE-324

Time allowed : 3 hours]   [Maximum marks : 100

Note:- *Students are required to attempt five questions selecting at least **one** question from each unit. All questions carry equal marks.*

Unit–I

1. What are the steps involved in query processing? Why queries are to be optimized? With an example explain how queries are optimized.

2. (a) Why is load balancing required in parallel database systems? Explain how it is performed?

   (b) Explain how concurrency control mechanism is used in distributed databases.   10+10=20

Unit–II

3. What do you mean by clustering? Discuss specific requirements for clustering. How Manhattan distance function is used in Hierarchical clustering?   20

4. Define data mining? How you can obtain multiple decision trees? Discuss the role of information gain for constructing a decision tree.   20

(2)

Unit- III

5. Discuss the necessary characteristics a system must satisfy to be considered as an object-oriented database management system (OODBMS).   20

6. (a) What are the trades off and benefits of using OODBMS over an ORDBMS? Explain.

   (b) Briefly explain object structures in OODBMS.10+10 =20

Unit- IV

7. (a) What is the significance of GIS, and how it relates to geographic information systems?   20

   (b) What do you mean by multimedia databases? What are its contents?   20

8. What is transaction? What are its properties? How you will ensure integrated access and security of transactions over multiple data sources?   20