UNIT V

ADVANCED TOPICS

1. What is Data warehousing?

Data warehousing: It is the process that is used to integrate and combine datafrom multiple sources and format into a single unified schema. So it provides the enterprise with a storage mechanism for its huge amount of data.

2. Define Integrity.

Integrity refers to the process of ensuring that a database remains an accurate reflection of the universe of discourse it is modeling or representing. In other words there is a close correspondence between the facts stored in the database and the real world it models.

3. What are Deductive Databases?

A **deductive database** system specify rules through a **declarative language** -a language in which we specify what to achieve rather than how to achieve it.An **inference engine** within the system can deduce new facts from thedatabase by interpreting these rules. The model used for deductive databases isrelated to the relational data model and also related to the field of **logicprogramming** and the **Prolog** language.

4. Mention two features of parallel Databases.

- It is used to provide speedup, where queries are executed fasterbecause more resources, such as processors and disks, are provided.
- It is also used to provide scaleup, where increasing workloads are handled without increased response time, via an increase in the degree of parallelism.

5. Mention two features of Multimedia databases.

- The multimedia database systems are to be used when it is required toadministrate a huge amounts of multimedia data objects of differenttypes of data media (optical storage, video, tapes, audio records, etc.)so that they can be used (that is, efficiently accessed and searched) for as many applications as needed.
- The Objects of Multimedia Data are: text, images, graphics, sound recordings, video recordings, signals, etc., that are digitalized and stored.

6.Define concurrency control.

Concurrency control is the activity of coordinating concurrent accesses to adatabase in a multiuser system. Concurrency control allows user to access a database in a multi-programmed fashion while preserving the consistency of the data.

7.What is Persistence?

Persistence is the property of an object through which its existence transcends time i.e. (the object continues to exist after its creator ceases to exist), and/or space (i.e. the object's location moves from the address space in which it was created).

8.Components of Distributed DBMS?

9.Define Database Security.

10.Define Recovery and ACID Property.

16/10/8 Marks Questions

1. Explain about web database.
2. Give XML representation of bank management system and also explain about Document Type Definition and XML schema.
3. Explain about the following:

i. Deductive DB
ii. Spatial DB

4. Briefly discuss client/server model with suitable example.
5. Compare and contrast between mobile databases and internet databases.
6. Explain how to identify active and deductive databases with an example.
7. Write detail note data mining with its various techniques.
8. Explain the different approaches used for object oriented databases.
9. Discuss in detail about structure and various operation of object oriented query language.
10. Explain about the decision trees in the process of data mining.
11. Explain the object oriented database and its approaches.
12. Discuss the issues and steps involved in building a data warehouse. How the concept of relational view is related to data warehouse and data marts?