1. What are the main goals of RAID technology? How does it achieve them?
2. What are the differences of differences among primary, secondary, and clustering indexes? How do these differences affect the ways in which these indexes are implemented? Which of the indexes are dense and which are not?
3. What are the reasons for converting SQL queries into relational algebra queries before optimization is done. What are the methods of implementing select operation? Explain.
4. What are the differences between query tree and query graph? What is meant by the term heuristic optimization? Discuss the main heuristics that are applied during query optimization.
5. What are the differences between discretionary and mandatory access control? Explain.
6. What is statistical database security? What measures can be taken to ensure some degree of privacy in statistical database?
7. What is object-oriented database? What are the primary characteristics of OID? Explain the overview of OODB with respect RDB concepts.
8. Discuss the various type constructors. How they are used to create complex object structure?
9. What are the challenges in implementing an ORDBMS? Explain.
10. Explain about the system comparison of RDBMS, OODBMS, ORDBMS?
11. What are the types of distributed database system? Explain concurrency control and recovery techniques in distributed database system.
12. What is fragmentation of a relation? What are the main types of fragmentation? Explain its types with respect to its representation.