1. What are the main differences between distributed database and non-distributed database?

2. (a) Explain canonical expression of a fragment query.
    (b) What is qualified relation and qualification of a qualified relation? Explain with an example.

3. (a) Describe about the nested-loop method.
    (b) Write about the use of joins as a query processing tactic.

4. Draw a neat diagram for distributed concurrency model and explain.

5. Explain in detail the conservative timestamp method. Discuss how it overcomes the disadvantages of basic timestamp method.

6. (a) Explain catalog management of distributed-INGRES and SDD-1 systems.
    (b) Discuss in detail Byzantine agreement.

7. (a) Write about garbage collection in distributed environment.
    (b) Explain detection-based algorithms for DBMS cache consistency.

8. Explain multi database concurrency control algorithms in detail.

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