Code: ICT 07A50503

ICT

B.Tech IV Year I Semester (R09) Supplementary Examinations, May 2013

DISTRIBUTED DATABASES
(Information Technology)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1.   (a)   Why we need to have distributed databases and distinguish the features of distributed databases with centralized databases?
     (b)   Explain with an example how to construct global relations from fragments.

2.   (a)   Explain search space and transformation rules for query processing.
     (b)   Discuss in detail object identifier management.

3.   (a)   Explain the objectives of query process optimization.
     (b)   Explain how semi-join operations can be reduced in DDB.

4.   (a)   Discuss the architectural aspects of distributed transactions.
     (b)   Explain about granularity based locking.

5.   Explain concurrency-control based on timestamps.

6.   (a)   Discuss the concept of authorization and protection in distributed databases.
     (b)   Briefly explain about cold restart.

7.   Write a short note on the following:
     (a)   Distributed garbage collection.
     (b)   Transaction management in object DBMS.
     (c)   Object clustering.

8.   Explain about transaction and computation model for distributed multi-DBMS in detail with an example.

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