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
*****

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.

*****