Code: R7420207

R7

B.Tech IV Year II Semester (R07) Supplementary Examinations March/April 2013

DATABASE MANAGEMENT SYSTEMS
(Electrical and Electronics Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1 (a) Explain the difference between a weak strong entity-set.
  (b) Explain the transaction management in a database.

2 (a) What is an unsafe query? Give an example and explain why it is important to disallow such queries.
  (b) What is relational completeness? If a query language is relationally complete, can you write any desired query in that language?

3 (a) Define query processing and briefly explain the steps involved in it.
  (b) Write quires for the following using the given information

Emp Name	DOB	DOJ	Emp Salary	Bonus	DOR
Buelin	06-12-1983	07-08-2005	15000	600	07-08-2055
Andy	12-01-1970	06-12-1973	20000	1200	06-12-2043
Lubber	07-08-1985	12-04-2006	13000	500	12-04-2056
Zobra	08-02-1960	07-03-1982	25000	1500	07-03-2032

(i) Find total salary of employees from emptable.

(ii) Find months between employess DOJ and DOR from emp-schema.

(iii) Create new salary table using the ampno, empname, and empsalary from existing table.

(iv) Arrange empnames in ascending and descending order.

4 (a) Define BCNF. How does BCNF differ from 3NF? Explain with an example.
  (b) Explain 3NF. Give one example.

5 (a) Discuss in detail about the lock based concurrency control.
  (b) What are the ACID properties? Explain them.

6 (a) Explain 2PL protocol in detail.
  (b) Discuss in detail about the time stamp based concurrency control.

7 (a) Write short notes on tree based indexing.
  (b) Differentiate between primary indexing and secondary indexing.

8 (a) Discuss in detail about the record formats.
  (b) Write short notes on extendible hashing.

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