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BCA (Sem.–4th)
DATABASE MANAGEMENT SYSTEM
Subject Code : BC-402 (2007 to 2010 Batch)
Paper ID : [B0216]

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students has to attempt any FOUR questions.**

SECTION-A

l. **Answer briefly :**

a) What is a schema?

b) What is a DBA?

c) What is the major role of a DBA?

d) What is a candidate key?

e) What is the difference between a schema and a subschema?

f) What do you understand by transaction comitting?

g) What is a logical and physical data base?

h) What is data integrity?

i) Give example using SQL for the retrieval using ANY.

j) Explain the delete statement of SQL with example.

SECTION-B

2) What are the various objectives of a data base system? Explain the architecture for a distributed data base.

3) Explain why locks are necessary in the concurrent operations on the database.

4) What are the first three normalization in relational data base model? Explain them with example.

5) What are the three levels of the Architecture for the data bases? Explain with example.

6) Given the following relations

Supplier(s#, Sname, City); S# as a key

Parts(P, Pname, Weight, Quantity); P as a key

Supply(S, P, Quantity);S, P as key

relational algebra to answer the following queries

(i) Find all part numbers being supplied

(ii) Find part numbers and part names of parts held in quantity of less than 25.

(iii) Find supplier names of suppliers who supply part number 3.

7) What are the security requirements for a Database? Explain.