

B.E/B.TECH.DEGREE EXAMINATION, MARCH/APRIL/MAY- 2011.

Third Semester
(Regulation 2008)

Computer Science and Engineering/Information Technology
CS9202 – DATABASE MANAGEMENT SYSTEMS

Duration: Three hours

Max. Marks: 100

PART –A (10*2=20 MARKS)

1. List various database Users
2. What is meant by a weak entity?
3. Write about Missing Information.
4. Define Integrity Constraints
5. Why it is necessary to decompose a relation?
6. Write about Dependency Preservation.
7. Define ACID property
8. Write about Shared and Exclusive locks
9. Define Query Evaluation engine
10. What is meant by Bucket over flow?

PART-B (5*16=80 MARKS)

11. i .Explain the component modules of a DBMS and their interactions with the architecture.(10)
ii. Construct an ER diagram to represent a Banking Enterprise. (6)

12. A.i.Explain the various Relational algebra operations (10)
ii. Write about Heterogeneous and Homogeneous databases (6)

(Or)

12. B.Explain about Domain relational calculus and Tuple relational calculus (16)

13. A.i.Define functional dependency and its types? And Explain about Boyce codd normal form. (10)
ii. Write about Non-loss Decomposition and dependency preservation(6)

(Or)

- 13.B. Define Normalization? Explain about 1st, 2nd and 3rd Normal forms with an example(16)

14. A. i. Explain Timestamp-based concurrency control protocol and Intent Locking (10)
ii. Explain about view serializability and conflict serializability with an example (6)

(Or)

14. B. i. Define deadlock and explain about deadlock detection and correction (8)
ii. Differentiate between two phase locking and two phase commit protocol(8)

15. A.i. Describe static hashing and dynamic hashing (6)
ii. Explain about various RAID levels. (10)

(Or)

15. B .i. Describe various file-organization techniques (6)
ii. Explain Merge Sort (4)
iii. Differentiate between B-tree and B+ Tree (6)