

5635132

B.Tech. DEGREE EXAMINATION,
NOVEMBER/DECEMBER 2016.

Fifth Semester

Computer.Science and Engineering
DATABASE MANAGEMENT SYSTEMS

(2013-2014 onwards)

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

1. What is a relational database system?
2. Define 'View' in a database system.
3. What is dynamic hashing?
4. What is the need for using constraints in the relational database system?
5. When will you say a given relation is in first normal form?
6. What is temporal data? Give an example.
7. Define atomicity.
8. What is serializability?

9. Why is concurrency control required in a database system?
10. What are the types of failures in database systems?

PART B — (5 × 16 = 80 marks)

11. (a) Briefly explain the relational operations used in Query processing in relational database systems.

Or

- (b) Give the syntax of Select, Insert, Delete and Update SQL queries on a relational database system.

12. (a) What are the applications of Indexing and Hashing in relational database systems?

Or

- (b) How Entity-Relationship modeling is done? What are its notations? Give an example ER model.

13. (a) How the normalization process decomposes a relation? Explain using an example.

Or

- (b) Set an example relation and explain normalization upto BCNF using it.

14. (a) Discuss Transaction isolation and transaction isolation levels.

Or

- (b) Why Query optimization is done in Database Systems and explain the process using an example.

15. (a) Explain how deadlocks are handled in Database systems.

Or

- (b) How a database is recovered from failures?