Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 97045

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Third Semester

Computer Science and Engineering

CS 6302 — DATABASE MANAGEMENT SYSTEMS

(Common to Computer and Communication Engineering and Information Technology)

(Regulation 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Why 4NF in Normal Form is more desirable than BCNF?

2. What is the purpose of Database Management System?

3. Differentiate between Dynamic SQL and Static SQL.

4. Give a brief description on DCL command.

5. Define the properties of Transaction.

6. What is Serializability? How it is tested?

7. Differentiate between Static and Dynamic Hashing.

8. Define Data Mining and Data Warehousing.

9. What is Crawling and Indexing the web?

10. What is Relevance Ranking?

PART B — (5 × 16 = 80 marks)

11. (a) Write Short Notes on: (16)

(i) Data Model and its Types.

(ii) E-R Diagram for Banking System.

Or

(b) What are Normal forms. Explain the types of Normal form with an example. (16)

12. (a) Explain the following with examples:

(i) DDL (4)

(ii) DML (4)

(iii) Embedded SQL (8)

Or

(b) Give a detailed description about Query Processing and Optimization. Explain the cost estimation of Query Optimization. (16)

13. (a) What is Concurrency? Explain it in terms of locking mechanism and two phase Commit Protocol. (16)

Or

(b) Write short notes on:

(i) Transaction concept. (8)

(ii) Deadlock. (8)

14. (a) (i) Explain in detail RAID technology. (8)

(ii) Write short notes on Spatial and Mobile Databases. (8)

Or

(b) Explain in detail about (i) B+ tree index (ii) B tree index Files. (16)

15. (a) (i) Write short notes on Distributed Transactions. (8)

(ii) Explain about Discretionary access Control Based on Granting and Revoking Privileges. (8)

Or

(b) Write Short notes on: (16)

(i) Classification

(ii) Clustering.

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