2319/SCS8C51 **APRIL 2011**

DATABASE MANAGEMENT SYSTEM

(For those who joined in July 2008 and 2009)

Time : Three hours Maximum : 75 marks

SECTION A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer.

1. There are ———————— physical data models available.

   (a) 3 (b) 2

   (c) 4 (d) 5

2. A DBMS is a collection of ———————— files.

   (a) abstract (b) interrelated

   (c) physical (d) logical

3. A second form of relational calculus is

   (a) tuple (b) domain

   (c) formal (d) queries

4. A delete request is expressed as a ————————.

(a) updating (b) query

(c) insertion (d) views

5. A relational database consists of a ————————.

(a) DATA (b) relation

(c) DML (d) EDML

6. SQL offers ———————— built-in aggregate functions.

(a) 4 (b) 5

(c) 6 (d) 7

7. SQL also provides a data type called ————————.

(a) small int (b) interval

(c) numeric (d) varchar

8. A transformation of sort is called a ————————.

(a) INTEGER (b) TYPE COERCION

(c) DDL (d) DML

9. ———————— was introduced as the Query language.

(a) DDL (b) QUEL

(c) DML (d) Tuple

10. A weaker normal form called ————————.

(a) 2NF (b) 3NF

(c) 4NF (d) 1NF

SECTION B — (5 × 7 = 35 marks)

Answer ALL questions.

11. (a) Explain the advantages of a DBMS.

Or

(b) Describe the features of ER model.

12. (a) What are the enforcing integrity constraints?

Or

(b) Explain the destroying/altering tables and views.

13. (a) Explain the Nested queries.

Or

(b) Describe the Triggers and Active databases.

14. (a) What are the other kinds of dependencies in schema?

Or

(b) Explain the schema refinement in database design.

15. (a) Describe the performance of locking.

Or

(b) Explain the concurrent execution of transactions.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the database design in detail.

17. Describe the Relational Algebra and Calculus.

18. Explain the SQL in detail.

19. Explain the Normal forms in detail.

20. Discuss about the security and authorization in detail.

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