LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION –COMPUTER SCIENCE

FOURTH SEMESTER – APRIL 2019

17/16UCS4MC01– RELATIONAL DATABASE MANAGEMENT SYSTEM

Date: 03-04-2019   Dept. No.   Max. : 100 Marks

Time: 09:00-12:00

SECTION A

ANSWER ALL THE QUESTIONS   (10 X 2 = 20)

1. What are the different components of client server architecture?
2. List down the different reasons for having views.
3. Define functional dependency.
4. What do you mean by properties in ER model?
5. What are the two types of Locks?
6. State the two phases of the two phase commit protocol.
7. What is subquery?
8. What is the difference between DELETE and TRUNCATE commands?
9. State the various advantages of PL/SQL.
10. What is a Cursor?

SECTION B

ANSWER ALL THE QUESTIONS   (5 X 8 = 40)

11. a. Explain about keys in detail.

    (OR)

    b.Explain of various relational operators with their syntax.

12. a. Explain about third normal form with an example.
              (OR)
    b. What are called as update anomalies? Explain in detail.

13. a. Write about system recovery in detail.
              (OR)
    b. Explain the three concurrency problems.

14. a. Write about various SQL date and number functions.
              (OR)
    b. Discuss on SQL indexes in detail with their syntax.

15. a. Discuss on PL/SQL exception handling with an example.
              (OR)
    b. Explain about various PL/SQL control statement with their syntax.

ANSWER ANY TWO QUESTIONS (2 X 20 = 40)

16. a. Explain the three levels of database system architecture.
    b. Discuss on Boyce Codd normal form in detail.

17. a. Draw the ER diagram for Library Management system.
    b. Explain about Transactions in detail.

18. a.Discuss on PL/SQL exception handling with an example.
    b.Create a table STUDENT with the following details :Student Regno, Name of the student, subjects for the

    current semester. Write SQL queries for the following.

        i. Insert 5 records into the table
        ii.Add new fields total and average
        iii.Update total and average fields
        iv.Display all the students who have got average mark > 85
        v. Delete the student names whose total is below 50%.

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