LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FOURTH SEMESTER – APRIL 2019

CS 4504– RDBMS AND ORACLE

Date: 11-04-2019　　　Dept. No.　　　　　　　　Max. : 100 Marks
Time: 01:00-04:00

SECTION-A

ANSWER ALL THE QUESTIONS :　　　　(10*2=20)

1. List any five applications of DBMS.

2. What is relationship?

3. Define Functional dependency.

4. Define De - normalization.

5. Explain "Query optimization"?

6. What is the use of sub queries?

7. List the SQL domain Types?

8. Types of clusters in DBMS?

9. What is the use of triggers .

10. How will you create a function ?

.

SECTION-B

ANSWER ALL THE QUESTIONS :　　　(5*8=40)

11.a) Explain the purpose and levels of DBMS in detail.

(OR)

b) List out the operations of the relational algebra and explain with suitable examples.

12.a) Write short notes on Transaction State and discuss the properties of transaction.

(OR)

b). Explain about dead lock recovery algorithm with an example.

13.a)How will you create update and alter a view ?

(OR)

b)What is constraints and its types ?

1

14.a)Explain about data definition language in SQL with examples.

(OR)

b)Explain the concept of index ?

15.a) What are the types of triggers ?

(OR)

b)Explain the concept of stored procedure **?**

SECTION -C

Answer any TWO Questions: **(2*20=40)**

16.a) Draw E – R Diagram for the "Restaurant Menu Ordering System", which will facilitate the food items

   ordering and services within a restaurant. The entire restaurant scenario is detailed as follows. The

   Customer is able to view the food items menu, call the waiter, place orders and obtain the final bill

   through the computer kept in their table. The waiters through their wireless tablet PC are able to

   initialize a table for customers, control the table functions to assist customers, orders, send orders to

   food preparation staff (chef) and finalize the customer's bill. The food preparation staffs (Chefs), with

   their touch-display interface to the system, are able to view orders sent to the kitchen by waiters.

   During preparation, they are able to let the waiter know the status of each item, and can send

   notification when items are completed. The system should have full accountability and logging

   facilities, and should support supervisor actions to account for exceptional circumstances, such as a

   meal being refunded or walked out on.

  b) Explain the various Normal Forms (1st, 2nd, 3rd, BCNF, 4th, 5th) with suitable examples.

17.a) Explain DML,DCL and TCL Commands in detail with suitable examples ?

  b) Explain in detail (i) Clustering (ii) Information Retrieval (iii) Transaction processing.

18.a) Discuss about package overloading with an example.

  b) ai) Discuss view serializability and conflict serializability.

    ii) Briefly describe two phase locking in concurrency control techniques.

★★★★★★★★