LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION –**COMPUTER SCIENCE**

FOURTH SEMESTER – **APRIL 2018**

CS 4504– RDBMS AND ORACLE

Date: 08-05-2018   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

SECTION-A

ANSWER ALL THE QUESTIONS: **(10X2 = 20)**

1. Define data, database, database management system and database system.

2. What are the types of attributes?

3. What is meant by functional dependencies?

4. Give reasons for allowing concurrency.

5. What is subquery?

6. What is the use of the INSERT ALL and INSERT FIRST statements?

7. What are the two types of blocks in PL/SQL?

8. List the four data types of PL/SQL.

9. How are actual and formal parameters associated?

10. What are the differences between function and procedure in PL/SQL?

SECTION-B

ANSWER ALL THE QUESTIONS: **(5 X 8 = 40)**

11.   a) Discuss about various operations in relational databases.

(OR)

b) Explain in detail about tuple relational calculus.

12.   a) Explain about Boyce Codd normal form.

(OR)

b) Discuss about transaction recovery.

13   a) List and explain various types of single-row functions.

(OR)

b) Explain correlated subquerywith example. How it differs from ordinary
subqueries.

14   a) Write a PL/SQL block to swap the values of two variables. Print the variables before and after swapping.

(OR)

b) Name and explain the control structures used in PL/SQL programming.

15   a) What is a trigger? Explain the working of BEFORE and AFTER triggers.

(OR)

b) What are the benefits of using a package? Describe two parts of a package and theircontents.

SECTION-C

ANSWER ANY TWO: **(2 X 20 =40)**

16.   i) Discuss about database users and administrators.   **(10)**

ii) Explain in detail about first, second and third normal form.   **(10)**

17.   i) Explain case and Decode in SQL with example.   **(10)**

ii) Explain the types of static cursor in detail.   **(10)**

18.   i) Explain procedures and functions with example.   **(10)**

ii) Explain the following with synatax and example.   **(10)**

a. Synonym, sequences, indexes, clusters.

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