LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FOURTH SEMESTER – **NOVEMBER 2016**

CS 4504 – RDBMS AND ORACLE

Date: 04-11-2016   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

PART – A

Answer ALL the questions: **(10 x 2 = 20 marks)**

1. Define relational data model.
2. Differentiate between Stored Vs Derived attribute.
3. Define Functional dependency.
4. Give the reasons for allowing concurrency?
5. What is subquery?
6. What is the use of the INSERT FIRST statement?
7. What is the difference between anonymous block and named block or stored procedure?
8. What is the difference between scalar data type and composite data type of PL/SQL?
9. What is a trigger?
10. What are the differences between function and procedure in PL/SQL?

PART – B

Answer ALL the questions: **(5 x 8 = 40 marks)**

11. a) Explain ER model by taking Hospital management as case study.

                               (OR)

    b) List out the disadvantages of File system over DB & Explain it in detail.

12. a) Explain 1st normal form, 2nd normal form and third normal form with example.

                               (OR)

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

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

                               (OR)

    b) Explain correlated subquery and Top-N query in detail.

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

                               (OR)

    b) Explain the three forms of IF statements.

15. a) Explain the working of BEFORE and AFTER triggers with example.

                               (OR)

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

Answer any TWO questions: (**2 x 20 = 40 marks**)

16. a) Explain the purpose and components of DBMS in detail.

   b) Define Dead Lock. Explain about dead lock prevention protocol.

17. a) Explain in detail on adding and removing constraints in Table.

   b) Explain the iterative control (LOOP statement) in PL/SQL.

18. a) Explain about Java stored procedures.

   b) Explain the types of exceptions in PL/SQL.

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