

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FOURTH SEMESTER – APRIL 2016

CS 4504 – RDBMS AND ORACLE

Date: 20-04-2016

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART - A

Answer ALL the Questions

(10 x 2 = 20 marks)

1. Differentiate physical and user logical level of a database.
2. Give the operations that involve cursors.
3. Define Deadlock.
4. Give the two phase locking protocol.
5. Give the special operators that are used with Sub query.
6. State the uses of Decode with an example.
7. Give the types of LOB.
8. Give the uses of synonyms and sequences.
9. State the uses of packages. Give its main parts.
10. Define Stored Procedure.

PART - B

Answer ALL the Questions

(5 x 8 = 40 marks)

11. a) Explain the Relational Algebra operators.
(or)
b) Draw an ER Diagram with 3 entity sets: customer, loan and branch which specifies that a customer may have several loans and that loan may belong to several different customers and each loan is associated with specific branch.
12. a) Write short notes on Transactions explaining the operations and ACID properties.
(or)
b) Define Normalization, 1NF, 2NF and 3NF.
13. a) Define Constraints. Give its types. Give the syntax for adding and removing constraints in a table.
(or)
b) Explain with examples any three characters, number and date functions.
14. a) Define Cursors. Give its types. Name the operations that can be performed using a cursor.
(or)
b) Define Index. Give its advantages and disadvantages. Give the syntax and its types.
15. a) Define Triggers. Explain its types.
(or)
b) Elaborate on functions in PL/SQL.

PART - C

Answer Any TWO Questions

(2 x 20 = 40 marks)

16. (a) Explain the various types of Keys.
(b) Write short notes on concurrency problem.
17. (a) Explain the Data types and Commands in DDL.
(b) How exceptions are handled in PL/SQL? Explain user defined exceptions with an example.
18. (a) Write short notes on the types of parameters passed to procedures with example.
(b) Solve the following queries. Student (id, name, class, mark1, mark2, mark3, Avg)
(i) List all students whose name start with 'JA' and ends with 'N'.
(ii) Find all students in class III whose avg is greater than or equal to 75.
(iii) Find all students whose avg is within the range 65 to 75.
(iv) List all students who Fails.
(v) Select all the rows in ascending order of avg.

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