KUMARAGURU
college of technology
character is life

MCA DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Fourth Semester

MASTER OF COMPUTER APPLICATIONS

MCA524: Advanced DBMS

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. Give the procedure for creating a user with necessary authentication in ORACLE.

2. List any four latest applications of database.

3. Give the difference between third normal form and Boyce-codd normal form.

4. Draw the schema diagram for library management system.

5. What is the use of query tree? Give an example.

6. List out the main goals of database tuning.

7. Define horizontal partitioning in distributed databases.

8. What is deduction mechanism in deductive databases?

9. Mention the six phases of Knowledge Discovery in Databases.

10. Give any two characteristics of biological data.

PART B (5 x 16 = 80 Marks)

11. a) (i)   Database users can be categorized into several classes. Discuss which class of   (10)
                users uses which type of interface to the database?

        (ii) Draw the diagram for level of data abstraction with a brief explanation.   (6)

                                (OR)

    b)   Describe the concepts of database architecture for DBMS with a neat diagram

12. a) (i)   Demonstrate the process of 1NF , 2NF and 3NF with suitable examples.   (10)

        (ii) Give the use of UML diagrams as an aid to database design specification.   (6)

                                (OR)

    b)   Describe the algorithms involved in relational database design.

13. a) (i) Give the factors that influence physical database design. (10)

   (ii) What control measures are used to provide security of data in databases? (6)

(OR)

   b) Explain the algorithms for implementing selection and sorting operations.

14. a) Describe the design and implementation issues for active databases and triggers.

(OR)

   b) Describe the concepts of temporal databases.

15. a) (i) Describe the concept involved in multimedia databases. (10)

   (ii) List out the distinctive characteristics of data warehousing. (6)

(OR)

   b) Explain the basic features and database programming concepts of PHP.

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