LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIRST SEMESTER – NOVEMBER 2017

CA 1808 - DATABASE MANAGEMENT SYSTEMS

Date: 11-14-2017   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

PART – A

Answer ALL questions   **10 X 2 = 20**

1. Define DBMS.
2. What are nested queries?
3. What are attributes? List its types.
4. Define BCNF.
5. List the User Interface Tools.
6. Write the ways of organizing records.
7. What are basic indices?
8. Give the statistical information of catalog.
9. Write Thomas' write-rule.
10. Give the classification of database failure.

PART – B

Answer ALL questions   **5 X 8 = 40**

11. a) Write note on viewing data for designing the database system.
    Or
    b) List and explain the set operations with example.

12. a) Describe on design issues of constructing ER diagram.
    Or
    b) Write short note on 4NF with example.

13. a) Elaborate on the security issues of applications.
    Or
    b) Write note on level of RAID.

14. a) What are ordered indices? Explain B-tree index of files.
    Or
    b) Write note on optimizing materialized view.

15. a) Elucidate on the protocol that are designed using time factor.
    Or
    b) Describe the recovery with concurrent transaction.

Answer any TWO questions   **2 X 20 =40**

16. a) What is file processing? Discuss about its disadvantages.

    b) Draw the symbols of ER notations and explain with an example.

17. a) Elaborate on storage device hierarchy.

    b) Describe on various transformational equivalence of relational expressions.

18. a) Explain lock-based protocol for concurrent execution.

    b) Elaborate the relational database design features of Microsoft SQL.

$$$$$$$