



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS**

**FIRST SEMESTER – APRIL 2016**

**CA 1808 - DATABASE MANAGEMENT SYSTEMS**

Date: 05-05-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART – A**

**Answer ALL questions**

**10 X 2 = 20**

1. Define DBMS.
2. What is view? Give its syntax.
3. What are the pitfalls to be avoided in DB schema?
4. Define 1NF.
5. How people are allowed to interact the database system?
6. List the types of organizing records in a file.
7. Give the basic types of indices.
8. Define query optimization.
9. What is meant by transaction?
10. List the types of failures in database.

**PART – B**

**Answer ALL questions**

**5 X 8 = 40**

11. a) Write note on database languages.  
**Or**  
b) Illustrate the queries of aggregate functions.
12. a) Explain how constraints are handled during ER design.  
**Or**  
b) Write note on 4NF with example.
13. a) Describe the fundamentals of web designing.  
**Or**  
b) Explain the storage device hierarchy.
14. a) Write short note on B<sup>+</sup> indexing with example.  
**Or**  
b) Discuss on various equivalence rule.
15. a) Elucidate transaction state with diagram.  
**Or**  
b) Discuss about deadlock handling.

**PART – C**

**Answer any two questions**

**2 X 20 =40**

16. a) Explain the database architecture with necessary diagram.  
b) Discuss on ER notations with example.
17. a) Write about various levels of RAID and its optimum usage.  
b) Define and explain various selection operations.
18. a) Explain Lock-Based protocol.  
b) Discuss oracle as an effective RDBMS.

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