



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

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

**FIRST SEMESTER – APRIL 2017**

**CA 1808- DATABASE MANAGEMENT SYSTEMS**

Date: 05-05-2017  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

**PART – A**

**Answer ALL questions**

**10 X 2 = 20**

1. List the levels of data abstraction.
2. Define table view with example.
3. What is relationship set?
4. Write Armstrong's axioms.
5. What is data encryption?
6. Define data dictionary.
7. List the factors for evaluating indexing of data.
8. Define query optimization.
9. List the stages of transaction.
10. What is shadow paging?

**PART – B**

**Answer ALL questions**

**5 X 8 = 40**

11. a) List and explain the disadvantages of file processing system.  
Or  
b) Write note on SQL data definition and query structure with example.
12. a) Write short note on qualities of ER diagram.  
Or  
b) Explain BCNF with example.
13. a) Illustrate how authorization is done in SQL.  
Or  
b) Write note on organizing records in files.
14. a) Describe B<sup>+</sup> tree indexing of files with example.  
Or  
b) What is materialized view? Explain its operations.

15. a) Elucidate lock-based protocols in transaction management.

Or

b) Discuss the Microsoft SQL server's RDBMS features.

**PART – C**

**Answer any two questions**

**2 X 20 =40**

16. a) Draw and explain the system structure and architecture of database management.

b) Discuss on functional dependency theory.

17. a) What is trigger? Explain its needs and definition with example.

b) Explain the various selection operation algorithms.

18. a) Explain recovery and atomicity mechanisms of transactions.

b) Discuss on stored procedures and functions of SQL with example.

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