

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

**M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE**

SECOND SEMESTER – APRIL 2010

**CS 2814 - ADVANCED DATABASE MANAGEMENT SYSTEM**

Date & Time: 23/04/2010 / 1:00 - 4:00

Dept. No.

Max. : 100 Marks

**PART – A (10 x 2 = 20)**  
**ANSWER ALL THE QUESTIONS**

1. What is called primary key?
2. What do you mean by functional Dependency?
3. List out the advantages of concurrent execution of transaction.
4. What is meant by Binary Lock?
5. Define the term : Data Warehousing
6. What is the use of data base Server?
7. What is Location Transparency?
8. Differentiate homogeneous DDBMS with heterogeneous DDBMS.
9. Define: Mandatory Security Mechanism.
10. What is the goal of Database Tuning?

**PART – B (5 x 8 = 40)**  
**ANSWER ALL THE QUESTIONS**

11. a) Discuss on Data definition languages.  
(Or)  
b) Differentiate between strong and weak entity-sets. Explain it with suitable example.
12. a) Explain any two techniques used to prevent deadlock.  
(Or)  
b) What is a Schedule? Explain the different types of schedules in Transaction of Databases.
13. a) Draw and Explain the Infrastructure – Based mobile platform Model.  
(Or)  
b) What are the goals of data mining and knowledge Discovery? Explain.
14. a) List all the four key elements of Parallel Database processing and explain it in detail.  
(Or)  
b) Explain any two types of fragmentation in detail.
15. a) Discuss the guidelines for tuning the data base design.  
(Or)  
b) What is the goal of encryption? What process is involved in encrypting data and then recovering it at the other end?

**PART – C (2 x 20 = 40)**  
**ANSWER ANY TWO QUESTIONS**

16. a) Explain Discuss in detail about 1NF, 2NF and 3NF with suitable example.

b) Discuss about different states of Transactions.

17. a) Write short notes on Characteristics of Data Warehouses.

b) Explain all kind of the Distribution transparency in DDBMS.

18. a) Mention and briefly explain the control measures that are used to provide security of data in data bases.

b) Describe the most popular technique used to recover the Data base.  
Analyze the advantages and disadvantages of that technique.

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