

**D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1****SEMESTER EXAMINATIONS****APRIL - 2018****15CIS6A****DATABASE MANAGEMENT SYSTEM****Time : 3 Hours****Max. Marks : 75****SECTION – A (10 x 2 = 20)****Answer ALL the questions.**

1. What is Database Management System?
2. What is Primary Key and Foreign Key?
3. Define Tuple variable.
4. Define Relational Calculus.
5. Define Query Language. Give the classification of query language.
6. Mention any 4 Aggregate Functions.
7. Define BCNF.
8. What are the pitfalls in Relational Database Design?
9. Why Distributed Databases are essential?
10. List the components of Object Oriented Data Model.

**SECTION – B (5 x 5 = 25)****Answer any FIVE of the following questions.**

11. Discuss about Mapping Constraints.
12. Briefly explain about Attributes and its types.
13. Write short notes on Tuple Relational Calculus.
14. Explain Group by and Having Clause.
15. Explain in detail about JOIN Functions.
16. Explain in details about Functional Dependency.
17. Describe how Distributed Database System and Centralized Database System Differs?
18. Write about the merits and demerits of Object Oriented Database.

**SECTION – C (3 x 10 = 30)****Answer ALL the questions.**

19. (a) Draw the architecture of DBMS and explain each of its components.

(Or)

- (b) Explain in detail about ER Diagram with example.

20. (a) List the Operations of the Relational Algebra and explain with suitable examples.

(Or)

- (b) With relevant examples discuss the following in SQL.

- (a) Data Definition Language.      (b) Data Manipulation Language.

21. (a) Explain in detail about BCNF.

(Or)

- (b) Discuss in detail about Client and Server.