1096

Code : 15CS33T

Register Number | | | | | | | | | | |

III Semester Diploma Examination, April/May-2019

DATABASE MANAGEMENT SYSTEMS

Time : 3 Hours] **[Max. Marks : 100**

Instructions : (i) Answer any **six** full questions from PART – **A**. Each carries **5** marks.
(ii) Answer any **seven** full questions from PART – **B**. Each carries **10** marks.

PART – A

1. What is database ? List the important characteristics of database approach. **5**

2. Differentiate between logical and physical data independence. **5**

3. Explain different cardinality ratios for binary relationship types. **5**

4. Define following terms : **5**
   (a) Domain
   (b) Attribute
   (c) Relation schema
   (d) Super key
   (e) Primary key

5. Write a note on aggregate functions in SQL. **5**

6. Explain UPDATE and ALTER command with example. **5**

7. Discuss second normal form with an example. **5**

8. Example the different UPDATE anomalies of tables. **5**

9. Explain the desirable properties of a transaction. **5**

[Turn over

PART – B

10. Explain the actors on the scene and workers behind the scene. 10

11. Identify the entities, relationships and develop an E-R diagram for a company database. 10

12. Define the following terms with example : 10
    (a) Entity
    (b) Composite attribute
    (c) Single valued attribute
    (d) Cardinality ratio
    (e) Tuple

13. Classify the constraints on databases and give examples for each of them. 10

14. Explain with example the different constraints that are violated during UPDATE and DELETE operations. 10

15. (a) Define view : How to create it ? Give example. 5
    (b) Explain different data types supported by SQL. 5

16. Explain the following with examples : 10
    (a) Where
    (b) Having
    (c) Order by
    (d) Distinct
    (e) Insert

17. Discuss the informal guidelines for relational schema. 10

18. Explain the categories of No SQL. 10

19. Draw a state diagram and discuss the typical states during transaction execution. 10
