

**E – 1898**  
**P. G. Diploma in Computer Application**  
**( Second Semester ) Examination June-2021**  
**(Old Course)**  
**DATABASE MANAGEMENT SYSTEM**  
**(PGDCA-107)**

Time : Three Hours ]

[ Maximum Marks : 100

**Note :-** Attempt any two part from each question. All questions carry equal marks.

**UNIT-I**

1. a. Draw and explain DBMS Architecture with suitable example.
- b. What do you mean by Data Model? Discuss its types with suitable example.
- c. Discuss the importance of Data Dictionary in DBMS.

**UNIT-II**

2. a. Draw an ER diagram for Library Management System and explain it.
- b. Discuss Entity. Attributes and keys with suitable example which are used in ER-Diagram.
- c. Explain Aggregation and specialization with suitable example.

**UNIT-III**

3. a. What do you mean by Relational Database? Explain with suitable example.
- b. Write a short note on Domain Relational Calculus.
- c. What do you mean by Query? Discuss simple and complex query with suitable example.

**UNIT-IV**

4. a. What are the various pitfalls in a relational database design? Explain.
- b. What is functional dependency? Explain with suitable example.
- c. Discuss 3NF and 4NF with suitable example.

**UNIT-V**

5. a. Discuss the importance of “Granting roles and Privilege with suitable example.
- b. Create a table employee with five fields and one Primary key in it and insert five records in it. After this delete two records from them and write query to display rest of the records.
- c. Discuss order by, Group and where clause with suitable query and example.

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