

DD-1010

P. G. Diploma in Computer Application (Second Semester) EXAMINATION, 2020

DATABASE MANAGEMENT SYSTEM

(PGDCA—107)

Time : Three Hours

Maximum Marks : 100

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

Unit—I

1. (a) Discuss the concept of data independence with example.
- (b) Specify Data Model with their types.
- (c) Explain the database architecture with diagram.

Unit—II

2. (a) Discuss the concept of E-R model with example.
- (b) Differentiate between weak and strong entity in E-R Model.
- (c) Throw light on specialization and generalization with examples.

Unit—III

3. (a) Briefly describe Relational Model with suitable example.
- (b) Specify selection and projection in relational algebra.
- (c) Explain the concept of tuple relation calculus.

Unit—IV

4. (a) Discuss functional dependency with example.
- (b) Write a short note on BCNF with example.
- (c) Differentiate between 4NF and 5NF with suitable examples.

Unit—V

5. (a) Differentiate between DDL and DML with example.
- (b) What do you understand by Views ? How can you create views in database ?
- (c) Specify the use of GROUP function and JOIN operation in SQL.