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.