

Roll No.

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D-1781

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

(New Course)

DATABASE MANAGEMENT SYSTEMS

(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) What is DBMS ? Explain advantage of DBMS.
- (b) Explain three level architecture of DBMS with example.
- (c) Write short notes on any *two* of the following :
 - (i) Database Languages
 - (ii) Functions of Database Administrator
 - (iii) Schema and Instance with example

Unit—II

2. (a) What is E-R Model ? Explain keys in ER with example.
- (b) Explain special ER features with example.

- (c) Construct an E-R diagram for Bank Management System having no. of customers.

Unit—III

3. (a) Explain Relational Algebra with their operations.
- (b) What is RDBMS ? Write any schema diagram of RDBMS.
- (c) What is Domain Relational Calculus ? Why do we need this ?

Unit—IV

4. (a) Explain 1 normal form with example.
- (b) What are the functional dependencies ?
- (c) Define good and bad decomposition.

Unit—V

5. (a) What is SQL ? Explain features of SQL and SQL operators.
- (b) Explain SQL function with example.
- (c) Write short notes on the following :
 - (i) ALTER
 - (ii) UPDATE
 - (iii) CREATE
 - (iv) DELETE
 - (v) DROP

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