Roll No......................

Total No. of Unit : 05
Total No. of Printed Pages : 03

Code No. : 02/217

Second Semester Examination, May 2019

PGDCA

Paper - II

DATABASE MANAGEMENT SYSTEM

Time : 3 Hrs.   Max. Marks : 100

- Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences.
  Part C (Short answer type) of each question will be answered in 200-250 words.
- Part D (Long answer type) of each question should be answered within the word limit 400-450.

Unit - I

Q.1 A. Define Database.   **(2)**

Q.1 B. Specify types of interactions catered by DBMS. **(2)**

Q.1 C. Discuss Data Independence with proper example?**. (4)**

OR

Classify types of database user in DBMS?

Q.1 D. What do you understand by data model? Specify data model types with suitable diagram.   **(12)**

OR

Explain the different types of database languages with example.

P.T.O.

Unit - II

Q.2 A. What is weak relationship in DBMS.   **(2)**

Q.2 B. What is an tuple?   **(2)**

Q.2 C. Describe the concept of ACID properties in DBMS.   **(4)**

OR

What are the main differences between Primary key and Foriengn Key? Explain.

Q.2 D. What do you mean by DFD? Describe its notation.   **(12)**

OR

Discuss features of E-R diagram. Differentiate between Specialization, Generalization and Aggregation.

Unit - III

Q.3 A. List some of the properties of a relation.   **(2)**

Q.3 B. Specify Relational calculus.   **(2)**

Q.3 C. Specify use of additional operators in relational algebra. **(4)**

OR

Draw a Relational model of School management system.

Q.3 D. What do you mean by relational algebra? Explain the different operations of it.   **(12)**

OR

Discuss the need of Domain Relational calculus with example.

Unit - IV

Q.4 A. What is subquery?   **(2)**

Q.4 B. Specify Project operation in DBMS.   **(2)**

Q.4 C. Discuss non-loss decomposition with example.   **(4)**

OR

Explain Multi valued functional dependency with example.

Q.4 D. Differentiate between DBMS and RDBMS with necessary details.   **(12)**

OR

Discuss the use of join dependency in 5th normal form.

Unit - V

Q.5 A. What is date type in oracle?   **(2)**

Q.5 B. Write short notes on group by command.   **(2)**

Q.5 C. What do you understand by view? Give syntax of view.   **(4)**

OR

Differentiate between Char and Varchar with example.

Q.5 D. What do you understand by Join? Elaborate different techniques of joins in DBMS.   **(12)**

OR

Discuss rules to create integrity constraint. Specify different Intergrity Constraints used in DBMS.

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