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**Term End Examination - June, 2018**  
**Diploma in Web Design**  
**DWD-05: Database Management Systems**

Time - 3 hours

Full Mark – 100

*Answer all questions from Group - 'A', any four questions from Group - 'B', any four questions from Group - 'C' and any two question from Group- 'D'*

**Group 'A'**

**Mark: 1 × 10= 10**

(Answer all the questions)

**Q.No.1. (Choose the correct answer)**

- i. Using which language can a user request information from a database?  
 a) Query    b) Relational    c) Structural    d) Compiler
- ii. A table on the many side of a one to many or many to many relationship must:  
 a) Be in Second Normal Form (2NF)    b) Be in Third Normal Form (3NF)  
 c) Have a single attribute key    d) Have a composite key
- iii. Which of the following makes the transaction permanent in the database?  
 a) View    b) Commit    c) Rollback    d) Flashback
- iv. Which of the following is used to get back all the transactions back after rollback?  
 a) Commit    b) Rollback    c) Flashback    d) Redo
- v. Dates must be specified in the format.  
 a) mm/dd/yy    b) yyyy/mm/dd    c) dd/mm/yy    d) yy/dd/mm
- vi. Ranking of queries is done by which of the following?  
 a) Group by    b) Order by    c) Having    d) Both Group by and Order by
- vii. In SQL the cross-tabs are created using.  
 a) Slice    b) Dice    c) Pivot    d) All of the mentioned
- viii. The attribute *name* could be structured as a attribute consisting of first name, middle initial, and last name. This type of attribute is called  
 a) Simple attribute    b) Composite attribute  
 c) Multivalued attribute    d) Derived attribute
- ix. Which of the following is a single valued attribute  
 a) Register\_number    b) Address    c) SUBJECT\_TAKEN    d) Reference
- x. Which of the following is a low level operator?  
 a) Insert    b) Update    c) Delete    d) Directory

**PTO.**

**Group 'B'****Mark: 5 × 4= 20****Q.No.2 (Answer any four questions each within 50 words)**

- a) Explain the properties of a relational data model.
- b) What are different types of database languages?
- c) Write a short note on SQL Injection.
- d) Write the properties of decomposition
- e) What is the purpose of a Physical Data Model?
- f) What are Stored Procedures? Explain it.

**Group 'C'****Mark: 10 × 4= 40****Q.No.3 (Answer any four questions each within 200 words)**

- a) Write the syntax of different DML commands with example.
- b) Write the Rules of Converting ER-Diagrams into tables.
- c) What is SQL? What are the different categories of SQL commands?
- d) Differentiate between Physical and Logical Data Independence.
- e) Explain the uses of different DDL Comands.
- f) Write the properties of a Relation or Table in a relational database.

**Group 'D'****Mark: 15 × 2= 30****Q.No.4 (Answer any two questions each within 250 words)**

- a) What is a Key? What are different types of Keys in relational databases?
- b) What is a join? Explain the various categories of joins that can be used to join two tables?
- c) Discuss the roles and responsibilities of a Database Administrator (DBA).
- d) Create a table LOAE Account with following schema: (AccNo, CustName, LoanAmount, IntRate, Instalments, StartDate, Interest)

**Write SQL queries for following question:**

- i. Insert a least 5 rows in the table.
- ii. Display all the information of LOAE Account table.
- iii. Delete the AccNo of CustName James.

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