DBMS Assignment - Unit 2 (Solved)

Multiple Choice Questions (Answers)

1. Which of the following is used to define the structure of a database table? -> (a) DDL

2. The `CREATE TABLE` statement is an example of a: -> (a) DDL command

3. Which of the following commands is used to insert a new record into a table? -> (b) INSERT

6. Which of the following is NOT a DDL command? -> (c) INSERT

7. `COMMIT` and `ROLLBACK` are examples of: -> (c) TCL commands

8. `COMMIT` is used to: -> (b) Permanently save changes made within a transaction

9. What does `ROLLBACK` do? -> (b) Revert changes made within a transaction

Short Answer Questions (Solved)

Q1. Which command is used to permanently remove a table from the database: CREATE, ALTER, DROP
Answer: DROP is used to permanently remove a table and its data and structure from the database. Example: DROP TABLE students;

Q2. What category of SQL commands (DDL, DML, TCL) is used to update existing information within a t
Answer: DML (Data Manipulation Language) is used to update existing information. The UPDATE statement is used. Example: UPDATE students SET marks = 85 WHERE id = 1;

Q3. If you made a mistake while entering data and want to undo the changes, which TCL command wou
Answer: Use ROLLBACK to undo the uncommitted changes in the current transaction. If changes were already committed, ROLLBACK cannot undo them. Example: ROLLBACK;

Q4. Short note on DDL, DML and TCL commands
Answer: DDL (Data Definition Language): Commands that define or modify database structures (schema). Examples: CREATE, ALTER, DROP, TRUNCATE. DML (Data Manipulation Language): Commands that manipulate data stored in the database. Examples: SELECT, INSERT, UPDATE, DELETE. TCL (Transaction Control Language): Commands that manage transactions and control changes. Examples: COMMIT (save changes), ROLLBACK (undo), SAVEPOINT (set a point to roll back to). Transactions ensure atomicity, consistency, isolation, and durability (ACID properties).

Q5. What is date function? Explain its types.
Answer: Date functions are built-in SQL functions used to get and manipulate date and time values. Common types: 1. Current date/time functions: - CURRENT_DATE, CURRENT_TIME, CURRENT_TIMESTAMP (standard SQL) - GETDATE() (SQL Server), NOW() (MySQL/PostgreSQL) 2. Extraction functions: - YEAR(), MONTH(), DAY(), DATEPART(), EXTRACT() to get parts of a date. 3. Arithmetic functions: - DATEADD(interval, value, date) to add intervals (SQL Server) - DATE_SUB, DATE_ADD (MySQL) or INTERVAL arithmetic to add/subtract days, months, years. 4. Difference functions: - DATEDIFF(end, start) (SQL Server), TIMESTAMPDIFF(unit, start, end) (MySQL) to find difference between dates. 5. Formatting and conversion: - CONVERT / CAST to change data types, FORMAT / DATE_FORMAT to format output (e.g.,

DATE_FORMAT(date, '%d-%m-%Y')). Examples: - MySQL: SELECT DATE_FORMAT(NOW(), '%d-%m-%Y'); - SQL Server: SELECT DATEADD(day, 7, GETDATE()); - PostgreSQL: SELECT EXTRACT(YEAR FROM CURRENT_DATE);