**Basic MySQL Questions**

1. What is MySQL?  
   a) Programming language  
   b) Operating system  
   c) Relational database management system  
   d) Text editor  
   **Answer:** c) Relational database management system
2. MySQL is an example of:  
   a) NoSQL Database  
   b) Relational Database Management System (RDBMS)  
   c) Key-Value Store  
   d) Graph Database  
   **Answer:** b) Relational Database Management System (RDBMS)
3. Which SQL statement is used to retrieve data from a database?  
   a) SELECT  
   b) FETCH  
   c) GET  
   d) RETRIEVE  
   **Answer:** a) SELECT
4. Which MySQL command is used to create a database?  
   a) MAKE DATABASE  
   b) CREATE DATABASE  
   c) NEW DATABASE  
   d) ADD DATABASE  
   **Answer:** b) CREATE DATABASE
5. What does the "DDL" stand for in MySQL?  
   a) Data Description Language  
   b) Data Definition Language  
   c) Data Derivation Language  
   d) Data Deployment Language  
   **Answer:** b) Data Definition Language

**Data Types in MySQL**

1. Which of the following is not a valid MySQL data type?  
   a) VARCHAR  
   b) INT  
   c) TEXT  
   d) STRING  
   **Answer:** d) STRING
2. What is the storage capacity of the TINYINT data type in MySQL?  
   a) 1 Byte  
   b) 2 Bytes  
   c) 4 Bytes  
   d) 8 Bytes  
   **Answer:** a) 1 Byte
3. What is the maximum character length of a VARCHAR field?  
   a) 256  
   b) 1024  
   c) 65535  
   d) 65532  
   **Answer:** c) 65535
4. Which MySQL data type is best suited for storing large text data?  
   a) VARCHAR  
   b) CHAR  
   c) TEXT  
   d) STRING  
   **Answer:** c) TEXT
5. Which data type is used for storing date values in MySQL?  
   a) DATE  
   b) DATETIME  
   c) TIMESTAMP  
   d) All of the above  
   **Answer:** d) All of the above

**SQL Queries & Clauses**

1. How do you select all columns from a table named "users"?  
   a) SELECT \* FROM users;  
   b) FETCH \* FROM users;  
   c) GET ALL FROM users;  
   d) SELECT ALL FROM users;  
   **Answer:** a) SELECT \* FROM users;
2. What is the purpose of the WHERE clause in MySQL?  
   a) To group records  
   b) To filter records  
   c) To sort records  
   d) To delete records  
   **Answer:** b) To filter records
3. Which SQL clause is used to sort query results?  
   a) ORDER  
   b) GROUP  
   c) SORT  
   d) ORDER BY  
   **Answer:** d) ORDER BY
4. What is the function of the GROUP BY clause?  
   a) Filters rows based on a condition  
   b) Sorts the records  
   c) Groups rows with similar values  
   d) Joins two tables  
   **Answer:** c) Groups rows with similar values
5. What does the LIMIT clause do?  
   a) Limits the size of the database  
   b) Limits the number of returned rows  
   c) Limits the number of columns  
   d) Limits the size of a table  
   **Answer:** b) Limits the number of returned rows

**Indexes & Constraints**

1. What is the purpose of an index in MySQL?  
   a) To enforce uniqueness  
   b) To improve query performance  
   c) To store images  
   d) To add new columns  
   **Answer:** b) To improve query performance
2. Which of the following is NOT a MySQL constraint?  
   a) UNIQUE  
   b) FOREIGN KEY  
   c) INDEX  
   d) CHECK  
   **Answer:** c) INDEX
3. What does the PRIMARY KEY constraint do?  
   a) Ensures no duplicate values  
   b) Establishes a relationship between tables  
   c) Allows NULL values  
   d) Allows multiple NULL values  
   **Answer:** a) Ensures no duplicate values
4. Which keyword is used to remove duplicate rows in a SELECT query?  
   a) DISTINCT  
   b) UNIQUE  
   c) REMOVE DUPLICATES  
   d) DIFFERENT  
   **Answer:** a) DISTINCT
5. What type of index does MySQL automatically create for a PRIMARY KEY?  
   a) Hash Index  
   b) B-Tree Index  
   c) Full-Text Index  
   d) Spatial Index  
   **Answer:** b) B-Tree Index

**Joins & Subqueries**

1. What type of JOIN returns only matching records from both tables?  
   a) LEFT JOIN  
   b) RIGHT JOIN  
   c) INNER JOIN  
   d) FULL JOIN  
   **Answer:** c) INNER JOIN
2. What does a LEFT JOIN return?  
   a) Only matching records  
   b) All records from the left table and matching records from the right  
   c) All records from the right table and matching records from the left  
   d) None of the above  
   **Answer:** b) All records from the left table and matching records from the right
3. Which SQL operator is used with a subquery?  
   a) IN  
   b) WITH  
   c) CONTAINS  
   d) FROM  
   **Answer:** a) IN
4. How do you rename a column in the output of a SELECT query?  
   a) SELECT column\_name AS new\_name FROM table;  
   b) CHANGE column\_name TO new\_name;  
   c) RENAME column\_name TO new\_name;  
   d) MODIFY column\_name TO new\_name;  
   **Answer:** a) SELECT column\_name AS new\_name FROM table;
5. What is a correlated subquery?  
   a) A subquery that executes once per table  
   b) A subquery that executes once per row  
   c) A subquery that executes multiple times randomly  
   d) A subquery that does not reference the outer query  
   **Answer:** b) A subquery that executes once per row

**Advanced MySQL Concepts**

1. What is the purpose of the MySQL VIEW?  
   a) Store data physically  
   b) Improve query performance  
   c) Provide a virtual table  
   d) Replace a table  
   **Answer:** c) Provide a virtual table
2. Which MySQL engine supports transactions?  
   a) MyISAM  
   b) InnoDB  
   c) MEMORY  
   d) CSV  
   **Answer:** b) InnoDB
3. How do you permanently remove all records from a table?  
   a) DELETE  
   b) TRUNCATE  
   c) DROP  
   d) CLEAR  
   **Answer:** b) TRUNCATE
4. What is the purpose of the HAVING clause?  
   a) To filter grouped records  
   b) To filter individual records  
   c) To sort data  
   d) To create new columns  
   **Answer:** a) To filter grouped records
5. What is the default port for MySQL?  
   a) 3306  
   b) 5432  
   c) 1521  
   d) 1433  
   **Answer:** a) 3306