

# SQL and HR Interview Questions - Answer Sheet

## Technical Questions

**Q: Which technology interests you more?**

A: I'm interested in backend development, so SQL and Java align well with my passion for designing scalable systems and working with data.

**Q: Are you familiar with SQL?**

A: Yes, I've worked with SQL for data retrieval, manipulation, and managing relational databases.

**Q: Difference between database and DBMS?**

A: A database is a collection of data, while a DBMS is software used to store, manage, and retrieve data from a database.

**Q: What is RDBMS?**

A: RDBMS stands for Relational Database Management System. It stores data in tables with rows and columns and maintains relationships using keys.

**Q: How is data stored in non-relational DBMS?**

A: In formats like key-value pairs, documents (e.g., JSON), graphs, or wide-column stores.

**Q: Have you worked with RDBMS?**

A: Yes, I've used MySQL and PostgreSQL. I'm also aware of Oracle and SQL Server.

**Q: What is SQL?**

A: SQL is Structured Query Language used to interact with relational databases for querying, updating, and managing data.

**Q: Difference between SQL and MySQL?**

A: SQL is a language, MySQL is a relational database that uses SQL.

**Q: Restrict data in tables?**

## SQL and HR Interview Questions - Answer Sheet

A: Yes, using constraints like NOT NULL, UNIQUE, CHECK, etc.

**Q: Create table SQL?**

A: CREATE TABLE Student (  
roll\_number INT PRIMARY KEY,  
name VARCHAR(30) NOT NULL,  
phone\_number VARCHAR(15)  
);

**Q: What is VARCHAR(30)?**

A: A variable-length string with a maximum of 30 characters.

**Q: Case-sensitivity in table names?**

A: Depends on DBMS and OS. Case-sensitive on Linux in MySQL.

**Q: Constraints like NOT NULL?**

A: Yes, define while creating the table or later using ALTER TABLE.

**Q: Primary vs Foreign Key?**

A: Primary key uniquely identifies rows. Foreign key links one table to another.

**Q: Foreign key requirements?**

A: It must match the data type of the referenced primary key and must exist.

**Q: CRUD operations?**

A: Create, Read, Update, Delete basic database operations.

**Q: Retrieve data?**

A: SELECT \* FROM Student;

**Q: Type of SELECT statement?**

## SQL and HR Interview Questions - Answer Sheet

A: DQL (Data Query Language).

**Q: Type of CREATE TABLE?**

A: DDL (Data Definition Language).

**Q: INSERT SQL?**

A: INSERT INTO Student (roll\_number, name, phone\_number)  
VALUES (1, 'Amit', '9876543210');

**Q: Insert multiple rows?**

A: Yes, using multiple value tuples.

**Q: Skip name or phone?**

A: If NOT NULL constraint exists, error. Else NULL stored.

**Q: Skip primary key?**

A: Error. Primary key can't be NULL.

**Q: What is NULL?**

A: Absence of value. Not the same as 0 or empty string.

**Q: DROP vs DELETE vs TRUNCATE?**

A: DELETE: removes rows, can rollback. TRUNCATE: removes all rows, can't rollback. DROP: removes table structure.

**Q: Why DELETE if TRUNCATE exists?**

A: DELETE allows filtering and rollback.

**Q: Check if table exists?**

A: Query information\_schema.tables or use SHOW TABLES.

## SQL and HR Interview Questions - Answer Sheet

**Q: USE database command?**

A: USE database\_name;

**Q: ORDER BY example?**

A: SELECT \* FROM Student ORDER BY name ASC;

**Q: Alias in SQL?**

A: SELECT name AS student\_name FROM Student;

**Q: Aggregate functions?**

A: COUNT(), SUM(), AVG(), MIN(), MAX()

**Q: Count students query?**

A: SELECT COUNT(roll\_number) FROM Student;

**Q: COUNT(\*) vs COUNT(column)?**

A: COUNT(\*) includes all rows; COUNT(column) ignores NULLs.

**Q: Max roll number?**

A: SELECT \* FROM Student WHERE roll\_number = (SELECT MAX(roll\_number) FROM Student);

**Q: Can we join tables?**

A: Yes, using JOINS.

**Q: Types of JOINS?**

A: INNER, LEFT, RIGHT, FULL, CROSS, SELF JOIN

**Q: What is INNER JOIN?**

A: Returns rows with matching values in both tables.

**Q: What is normalization?**

## SQL and HR Interview Questions - Answer Sheet

A: Organizing data to reduce redundancy.

**Q: Explain 1NF?**

A: Ensures atomic values and uniqueness in each record.

### HR Questions

**Q: Learned additional technologies?**

A: Yes, explored full-stack development using ReactJS, NodeJS, AWS, and Docker.

**Q: Technology used in projects?**

A: React for frontend, Spring Boot for backend, MySQL for DB.

**Q: Participated in hackathons?**

A: Yes, including cloud-based AI/ML hackathons.

**Q: Certifications?**

A: AWS Cloud Practitioner, Red Hat EX183, Salesforce AI Associate.

**Q: Led or participated in other events?**

A: Mentored students as Java Lead and MERN Stack mentor.

**Q: Interested roles?**

A: Prefer backend development, open to full-stack roles.

**Q: Willing to switch to testing?**

A: Yes, open to learning and contributing wherever needed.

**Q: Teamwork experience?**

A: Led a 4-member final year project team with weekly sync-ups.

## **SQL and HR Interview Questions - Answer Sheet**

**Q: Willing to relocate?**

A: Yes, ready for both domestic and international relocation.