1. **Which of the following is a relational database management system?**
   * A) Python
   * B) MySQL
   * C) HTML
   * D) Git
   * **Answer:** B) MySQL
2. **What does SQL stand for?**
   * A) Structured Query Language
   * B) Simplified Query Language
   * C) Sequential Query Language
   * D) Systematic Query Language
   * **Answer:** A) Structured Query Language
3. **Which of the following is NOT a SQL data type?**
   * A) INT
   * B) VARCHAR
   * C) DECIMAL
   * D) STRING
   * **Answer:** D) STRING
4. **In SQL, what is a collection of related data called?**
   * A) Database
   * B) Table
   * C) Row
   * D) Column
   * **Answer:** A) Database
5. **Which SQL statement is used to extract data from a database?**
   * A) GET
   * B) EXTRACT
   * C) SELECT
   * D) FETCH
   * **Answer:** C) SELECT
6. **What happens when you issue the DROP TABLE statement in SQL?**
   * A) The table data is deleted, but the table structure remains.
   * B) The table structure and data are permanently deleted.
   * C) The table is archived but can be restored.
   * D) The table data is hidden but not deleted.
   * **Answer:** B) The table structure and data are permanently deleted.
7. **Which SQL command is used to modify an existing row in a table?**
   * A) MODIFY
   * B) UPDATE
   * C) ALTER
   * D) REPLACE
   * **Answer:** B) UPDATE
8. **What is a foreign key in SQL?**
   * A) A key used to uniquely identify each row in a table.
   * B) A key used to identify rows in another table.
   * C) A key used to reference the primary key of another table.
   * D) A key used to limit duplicates in a table.
   * **Answer:** C) A key used to reference the primary key of another table.
9. **Which SQL clause is used to filter the result set based on a condition?**
   * A) GROUP BY
   * B) HAVING
   * C) WHERE
   * D) ORDER BY
   * **Answer:** C) WHERE
10. **Which operator in SQL is used to check for a range of values?**
    * A) IN
    * B) LIKE
    * C) BETWEEN
    * D) NOT
    * **Answer:** C) BETWEEN
11. **What does the DISTINCT keyword do in a SQL query?**
    * A) Selects unique values from a column
    * B) Deletes duplicate values
    * C) Counts the total rows in a table
    * D) Groups values together
    * **Answer:** A) Selects unique values from a column
12. **Which function in SQL is used to calculate the average value of a numeric column?**
    * A) AVG()
    * B) MEAN()
    * C) SUM()
    * D) MEDIAN()
    * **Answer:** A) AVG()
13. **Which SQL command is used to remove records from a table without removing the table itself?**
    * A) DROP
    * B) TRUNCATE
    * C) DELETE
    * D) CLEAR
    * **Answer:** C) DELETE
14. **What does the SQL function LEN() return?**
    * A) The total number of rows in a table
    * B) The length of a string in a column
    * C) The total size of a database
    * D) The distinct values in a column
    * **Answer:** B) The length of a string in a column
15. **Which type of SQL JOIN returns all records from the left table and matching records from the right table, with NULL where there are no matches?**
    * A) INNER JOIN
    * B) FULL JOIN
    * C) LEFT JOIN
    * D) CROSS JOIN
    * **Answer:** C) LEFT JOIN
16. **Which SQL statement is used to modify the structure of an existing table?**
    * A) MODIFY TABLE
    * B) CHANGE TABLE
    * C) ALTER TABLE
    * D) UPDATE TABLE
    * **Answer:** C) ALTER TABLE
17. **Which SQL operator is used to combine multiple conditions in a WHERE clause?**
    * A) AND
    * B) JOIN
    * C) IF
    * D) MATCH
    * **Answer:** A) AND
18. **What does the GROUP BY clause do in SQL?**
    * A) It sorts rows in ascending order
    * B) It groups rows that have the same values into summary rows
    * C) It filters rows based on a condition
    * D) It limits the number of rows returned
    * **Answer:** B) It groups rows that have the same values into summary rows
19. **Which type of subquery can be used inside a SELECT statement to return a single value?**
    * A) Correlated subquery
    * B) Scalar subquery
    * C) Multi-row subquery
    * D) Independent subquery
    * **Answer:** B) Scalar subquery
20. **What does the following query return? SELECT \* FROM Employees E WHERE EXISTS (SELECT \* FROM Departments D WHERE E.dept\_id = D.dept\_id);**
    * A) All employees with a matching department
    * B) All employees without a department
    * C) All departments with employees
    * D) All employees who do not belong to a department
    * **Answer:** A) All employees with a matching department
21. **Which SQL command is used to change an existing table's name?**
    * A) MODIFY TABLE
    * B) ALTER TABLE
    * C) RENAME TABLE
    * D) CHANGE TABLE
    * **Answer:** C) RENAME TABLE
22. **What does the SELECT COUNT(\*) query return?**
    * A) The sum of values in all rows
    * B) The number of rows in a table
    * C) The total number of distinct rows
    * D) The maximum value in a column
    * **Answer:** B) The number of rows in a table
23. **Which SQL clause is used to group rows that have the same values in specified columns?**
    * A) GROUP BY
    * B) HAVING
    * C) WHERE
    * D) ORDER BY
    * **Answer:** A) GROUP BY
24. **Which SQL function is used to count the number of rows in a table?**
    * A) COUNT()
    * B) SUM()
    * C) AVG()
    * D) MAX()
    * **Answer:** A) COUNT()
25. **What is the purpose of the HAVING clause in SQL?**
    * A) To apply a filter on aggregate functions
    * B) To sort data in descending order
    * C) To return rows with duplicate values
    * D) To limit the number of rows returned
    * **Answer:** A) To apply a filter on aggregate functions