



INFORMATICS PRACTICES

ASSIGNMENT 2 CLASS XII

JULY 2026

Q1. Which of the following is not a feature/advantage of SQL?

- (a) It is platform independent
- (b) It is a high-level, English-like language
- (c) It can only be used by professional programmers
- (d) It supports client-server architecture

Q2. Which of the following is a DDL command?

- (a) UPDATE (b) INSERT (c) ALTER (d) SELECT

Q3. State whether the following statement is True or False:

"DELETE is a DDL command used to remove a table's structure permanently from the database."

Q4. Fill in the blank: The SQL command used to remove the entire structure of a table along with its data from the database is _____.

Q5. Which of the following is the correct data type to store a person's date of birth in MySQL?

- (a) INT (b) VARCHAR (c) DATE (d) BOOLEAN

Q6. Assertion (A): A PRIMARY KEY constraint ensures that a column cannot contain NULL values.

Reason (R): A PRIMARY KEY also ensures uniqueness of every value in the column.

- (a) Both A and R are true, and R is the correct explanation of A
- (b) Both A and R are true, but R is not the correct explanation of A
- (c) A is true, but R is false
- (d) A is false, but R is true

Q7. Which clause is used to display only those rows of the result that satisfy a specified condition?

Q8. What is the difference between DDL and DML commands? Give one example of each.

Q9. Differentiate between CHAR and VARCHAR data types in SQL.

Q10. What is an alias in SQL? Write a query to display the Name column of a table STUDENT with the alias Student_Name.

Q11. What do you understand by Query Processing in SQL? Briefly name the stages it goes through.

Q12. What is the purpose of the ORDER BY clause in SQL? Write a query to display all records from a table EMPLOYEE sorted by Salary in descending order.

Consider the table EMPLOYEE given below:

EmpID	Name	Department	Salary	DOJ
101	Ravi Kumar	Sales	35000	2018-06-01
102	Anita Singh	HR	42000	2019-03-15
103	Vikram Rao	Sales	38000	2020-07-20
104	Sneha Joshi	IT	55000	2017-11-05

Q13. Write SQL queries for the following:

- (i) To display the names and salaries of all employees working in the "Sales" department.
- (ii) To display the details of employees whose name contains the letter 'a' anywhere in it.

Q14. Write SQL queries for the following:

- (i) To display the Name and Department of all employees, sorted first by Department in ascending order, and then by Salary in descending order.
- (ii) To display the details of employees who joined between 2018-01-01 and 2020-01-01.

Q15. Differentiate between WHERE and HAVING clauses in SQL, with the help of suitable examples.

Q16. What are constraints in SQL? Explain NOT NULL and UNIQUE constraints with a suitable example each, using the EMPLOYEE table given above.

Q17. Based on the EMPLOYEE table given above, write SQL queries for the following:

- (i) Which attribute can be considered as the Primary Key of this table? Justify your answer.
- (ii) Write a query to add a new column Bonus of numeric data type to the EMPLOYEE table.
- (iii) Write a query to update the Salary of the employee with EmpID 101 to 40000.
- (iv) Write a query to change the structure of the table to make Name a NOT NULL column.

Q18. Explain the classification of SQL statements into DDL, DML, and DQL. List any two

commands under each category, and write the basic syntax of one command from each category.

Q19. Write the output of the following SQL queries, based on the EMPLOYEE table given above:

- (i) `SELECT COUNT(*) FROM EMPLOYEE WHERE Department = 'Sales';`
- (ii) `SELECT Department, AVG(Salary) FROM EMPLOYEE GROUP BY Department;`
- (iii) `SELECT UPPER(Name) FROM EMPLOYEE WHERE Salary > 40000;`
- (iv) `SELECT Name FROM EMPLOYEE WHERE Name LIKE 'A%';`

Q20. Consider a table BOOKS with columns Book_ID, Title, Author, Price, and Qty. Write SQL queries for the following:

- (i) To create the table BOOKS with appropriate data types and a PRIMARY KEY constraint on Book_ID.
- (ii) To insert one record into the BOOKS table using a single INSERT INTO statement.
- (iii) To display the Title and Price of books in ascending order of Price, putting the literal text "Rs." before each price value in the output column heading.
- (iv) To display the number of books (using an aggregate function) where the Price is greater than 500.