Started on	Thursday, 5 February 2026, 3:35 PM
State	Finished
Completed on	Thursday, 5 February 2026, 3:48 PM
Time taken	12 mins 31 secs
Marks	11.00/15.00
Grade	**73.33** out of 100.00

Question 1

Complete

Mark 0.00 out of 1.00

1. Which query finds employees who earn more than the average salary of their own department?

- ○ a. SELECT name FROM employees e1 WHERE salary > (SELECT AVG(salary) FROM employees e2 WHERE e1.dept_id = e2.dept_id)
- ○ b. SELECT name FROM employees WHERE salary > (SELECT AVG(salary) FROM employees)
- ○ c. SELECT name FROM employees WHERE salary > AVG(salary)   *Ans: a*
- ◉ d. SELECT name FROM employees GROUP BY dept_id HAVING salary > AVG(salary)

Question 2

Complete

Mark 1.00 out of 1.00

10. What happens if you try to insert a duplicate value into a column defined as a PRIMARY KEY?

- ○ a. The insert succeeds and replaces the original row.
- ◉ b. The insert fails due to a duplication violation.
- ○ c. The database automatically increments the value.
- ○ d. The database creates a secondary index.

Question 3

Complete

Mark 1.00 out of 1.00

11. To combine the results of two SELECT statements and remove duplicate rows, which keyword is used?

- ○ a. INTERSECT
- ○ b. JOIN
- ◉ c. UNION
- ○ d. UNION ALL

Question 4

Complete

Mark 0.00 out of 1.00

12. When using GROUP BY department_id, what happens to columns in the SELECT list that are neither aggregated nor in the GROUP BY clause?

- ○ a. It causes an error in most SQL engines (like PostgreSQL/SQL Server).
- ◉ b. The query runs and picks the first available value.
- ○ c. The query returns NULL.   *Ans: a*
- ○ d. The column is automatically hidden.

Question 5

Complete

Mark 1.00 out of 1.00

13. If a FOREIGN KEY is defined with ON UPDATE CASCADE, what happens to the child row if the parent's ID is updated?

- ○ a. The child row is deleted.
- ◉ b. The child row's foreign key is automatically updated to match.
- ○ c. The update is blocked.
- ○ d. The child row's foreign key becomes NULL.

14. Which index type is generally best for range-based queries (e.g., WHERE price > 100)?

- a. Bitmap Index
- b. GIN Index
- c. Hash Index
- ◉ d. B-Tree Index

15. Which of the following is the correct syntax to modify an existing value in a specific row?

- a. CHANGE Users SET Name = 'New' WHERE ID = 1
- b. MODIFY Users SET Name = 'New' WHERE ID = 1
- ◉ c. UPDATE Users SET Name = 'New' WHERE ID = 1
- d. UPDATE Users WHERE ID = 1 INTO Name = 'New'

2. In a LEFT JOIN scenario, if the right table has no matching rows for a record in the left table, what values are populated for the right table's columns?

- a. Blank spaces
- b. Zeros
- c. The query throws an error
- ◉ d. NULL

3. Which command removes all records from a table without deleting the structure and is faster than DELETE?

- a. REMOVE TABLE
- b. DELETE ALL
- ◉ c. TRUNCATE TABLE
- d. DROP TABLE

4. What occurs in a parent-child relationship if a parent row is deleted and the foreign key is set to ON DELETE CASCADE?

Ans: c

- a. Only the parent row is deleted.
- ◉ b. The child rows remain but their foreign key becomes NULL.
- c. Both the parent row and all related child rows are deleted.
- d. The parent row deletion is blocked.

5. In the standard order of SQL execution, when does the HAVING clause filter results?

- ◉ a. After the GROUP BY clause but before the SELECT output.
- b. At the very beginning of the query.
- c. Before the WHERE clause.
- d. Immediately after the FROM clause.

Question 12

Complete

Mark 1.00 out of 1.00

6. Which query correctly identifies the second-highest salary from the employees table?

- a. SELECT MAX(salary) FROM employees
- b. SELECT TOP 2 salary FROM employees
- c. SELECT salary FROM employees LIMIT 2
- ⦿ d. SELECT MAX(salary) FROM employees WHERE salary < (SELECT MAX(salary) FROM employees)

Question 13

Complete

Mark 1.00 out of 1.00

7. What is the result of SELECT COUNT(*) versus SELECT COUNT(column_name)?

- a. COUNT(*) only counts rows that have at least one value.
- b. They are identical.
- ⦿ c. COUNT(*) counts all rows; COUNT(column_name) counts only non-NULL values in that column.
- d. COUNT(column_name) is always faster.

Question 14

Complete

Mark 0.00 out of 1.00

8. According to the rules of UNIQUE constraints, can a column contain multiple NULL values if it is not marked NOT NULL?

- a. Only if the AUTO_INCREMENT property is set.
- ⦿ b. Only one NULL is ever allowed.
- c. No, UNIQUE implies NOT NULL.
- d. Yes, because NULL is not considered equal to another NULL.

Ans: d

Question 15

Complete

Mark 1.00 out of 1.00

9. Which operator is most efficient for checking if a value exists within a range (e.g., between 60 and 75)?

- ⦿ a. BETWEEN
- b. LIKE
- c. IN
- d. EXISTS