

Mid Term Exam

Total Marks:100

Date: 8-11-2024

Q.No	QUESTIONS	Marks
1	Explain the difference between Primary Key and Foreign Key in SQL.	5
2	What is a Self Join? Provide an example using the employees table to list employees who share the same manager ID , showing only their first names and manager IDs .	5
3	<p>Create a table of Employees which has the following fields</p> <ul style="list-style-type: none">a. Employee_Idb. First Namec. Last Named. Date of Birthe. Department Idf. Salary <p>Create a table Projects with the following fields:</p> <ul style="list-style-type: none">a. Project IDb. Project Namec. Start Dated. End Datee. Budget <p>Create a table Employee_Projects with the following fields:</p> <ul style="list-style-type: none">a. Employee IDb. Project ID <p>Ensure that each employee can work on multiple projects and a project can have multiple employees.</p>	20
Use dummydb in MySQL to answer the following questions: Link		
4	Using the dummydb, write an SQL query to get the third-highest salary in the employees table.	8

5	Write a query to show the department names and the number of employees in each department.	10
6	Illustrate INNER JOIN, LEFT JOIN, RIGHT JOIN, and CROSS JOIN with examples using the employees and departments tables.	14
7	What is a Common Table Expression (CTE)? Write an example query using CTE to show the names of employees whose salary is higher than the average salary.	8
8	Write a query to display the names of employees who earn a salary less than the employee "Steven King".	10
9	Write a query to find the department names and the names of the managers for each department.	10
10	Write a query to display the names of all cities where departments are located .	10

