<u>**CHRIST (Deemed to be University)**</u>

<u>**Department of Computer Science**</u>

<u>**Master of Computer Applications**</u>

Course: MCA513-1 - Advanced Database Technologies

Exercise No: LAB Exercise – 3

Date of assignment: 21-07-2025   Date of submission: 23.07.2025

Demonstration of JOINS, SET operations, and Sub Queries using SQL.

1. Write SQL statements to demonstrate the following JOIN operations on the tables created for your application domain. NATURAL, INNER, LEFT, RIGHT, and FULL OUTER JOINS.

Specifications:

a. The Operations should be performed on tables with logical sense and mention valid justification.

b. What is the difference between NATURAL JOIN and INNER JOIN?

2. Write compound SQL statements to demonstrate the following SET operations on the tables created for your application domain. UNION, UNION ALL, INTERSECT, and MINUS

Specifications:

a. The Operations should be performed on tables with logical sense and mention valid justification.

b. What is the difference between UNION and UNION ALL?

c. Show how to sort the result set of a compound query which performs SET operations.

Q3. Demonstrate the usage of subqueries to implement the operations to be performed on the tables created for your application domain.

Specification:

a. At least 5 Queries should be demonstrated.

b. All tables should be used in at least 1 Compound SQL Query to perform a specified operation.

c. The Operations should be performed on tables with logical sense and mention valid justification

d. Mention the types of subqueries and its differences.

Evaluation Scheme: (Total 10 Marks)

Correctness and Demonstration   (5 marks)

Concept Clarity (Viva)   (3 marks)

Initiative & Effort (self-learning)   (2 marks)

General Instruction:

1. Create a Word document and paste all the answers. The file name should be your register number followed by lab No: Example: 2547101_Lab3

2. Upload the answer document in Google Classroom on or before the deadline mentioned.