CHRIST (Deemed to be University)

Department of Computer Science

Master of Computer Applications

Course: MCA513-1 - Advanced Database Technologies

Exercise No: LAB Exercise - 6

Date of assignment: 05-08-2025 Date of submission: 10.08.2025

Exercise: Simulate the Timestamp Ordering (TO) Concurrency Control Algorithm in your respective business domain using SQL, where multiple transactions access concurrently.

- 1. Schema Design (Table to simulate the data items and track transaction)
- 2. Insert a data item with initial values, timestamp and Insert two transactions with logical timestamps
- 3. Simulate the read operation with timestamp ordering logic
- 4. Simulate the write operation with timestamp ordering logic
- 5. A brief explanation of how each TO operation is demonstrated.

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_Lab6
- 2. Upload the answer document in Google Classroom on or before the deadline mentioned.