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**Faculty of Technology and Engineering**

**Chandubhai S. Patel Institute of Technology (CSPIT)**

**Department of Computer Science & Engineering**

Date: / /

**Laboratory Manual**

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| Academic Year | : | 2024-25 | Semester | : | 4 |
| Course code | : | CSE206 | Course name | : | DATABASE MANAGEMENT SYSTEM |

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| **Practical - 5** |
| **Aim: As a database administrator for a global bank, you are responsible for managing and analyzing employee and customer data stored in the bank’s database. Your tasks involve using SQL functions to manipulate and retrieve critical information efficiently. These operations ensure seamless data communication and compliance with bank regulations.**  **Constraints**   * **Not Null Constraints: Critical fields like names and salaries must not be null.** * **Unique Constraints: Ensure integrity of fields like Job\_ID.** * **Check Constraints: Validate positive salary values.**   **The bank maintains the following schemas:**  **1. JobProfile Table: Stores details of employees and their job roles.**   * **Emp\_ID (Primary Key)** * **Emp\_Name (Not Null)** * **Emp\_Salary (Not Null, Check: Greater than zero)** * **Job\_ID (Unique)** * **Department**   **2. Customer Table: Stores customer details.**   * **Cust\_ID (Primary Key)** * **Cust\_Name (Not Null)** |
| 1. Calculate the average salary of employees (with and without duplicates) |
| 1. Retrieve the minimum salary from the JobProfile table. |
| 1. Count the total number of employees and distinct departments. |
| 1. Retrieve the maximum salary from the JobProfile table. |
| 1. Calculate the total and distinct sum of all salaries. |
| 1. Calculate the absolute difference between each employee’s salary and ₹1,000. |
| 1. Compute the square of each employee’s salary. |
| 1. Round salaries to two decimal places. |
| 1. Find the square root of salaries. |