SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

Assessment 02

Answer all the Questions

Section A (3)

Aim: To use constraints and formulate the tables (created under Assessment 1) to have consistent data. Apply below constraints over the relations and ensure that consistency is maintained in the data.

- 1. Set primary keys in every relation
- 2. Add foreign keys (referential integrity constraint)
- 3. Set a Not Null constraint on a column
- 4. Use check constraint and ensure only certain allowed values are entered in a specific column.
- 5. Set a column as unique
- 6. Use of 'On delete cascade'

Section B (7)

Aim: To develop required queries for an employee database with required attributes appropriately [wherever needed] by inserting with a minimum 7 to 10 rows (that fulfil all the requirements to answer all the queries)

Note: your input to the tables should be in a way that it should return at least one/two rows for each of the following queries

- 1. Find the employees who earn the same salary as the minimum salary for each department
- 2. Retrieve the employees whose salary is greater than average salary of department.
- 3. Find out the project name having least number of employees working on it.
- 4. Display the names of all employees in department who work more than 10 hours per week on the 'SCOPE' project.
- 5. Find the names of all the employees who are directly supervised by 'Sundar Pichai'.
- 6. Find the names and addresses of all employees who work on at least one project located in Mumbai but whose department has no location in Mumbai.
- 7. For each project, list the project name and the total hours per week (by all employees) spent on that project.