**Problem Sheet – I(19PW13)**

1. Create a table employee with fields Name (varchar (15)), Designation (varchar (15)),

Dept. (varchar (15)), Salary (int), Phone\_number (bigint(10)).

CREATE TABLE 19PW13\_EMPLOYEE(  
 Name VARCHAR(15) NOT NULL ,  
 Designation VARCHAR(15) NOT NULL ,  
 Dept VARCHAR(15) NOT NULL ,  
 Salary INT NOT NULL ,  
 Phone\_number BIGINT(10)  
);

1. Add a new column ID (int) as the first column in the employee table.

ALTER TABLE 19PW13\_EMPLOYEE  
 ADD COLUMN ID INT NOT NULL FIRST;

3. Add another column City (varchar (15)) after the Salary column and Last\_name

(varchar (5)) after the Name column.

ALTER TABLE 19PW13\_EMPLOYEE  
 ADD COLUMN City VARCHAR(15) AFTER Salary,  
 ADD COLUMN Last\_name VARCHAR(5) AFTER Name;

4. Change the size of the column Last\_name from 5 to 20.

ALTER TABLE 19PW13\_EMPLOYEE  
 CHANGE COLUMN Last\_name Last\_name VARCHAR(20);

5. Add a new column Date\_of\_joining (date) at the end of the employee table.

ALTER TABLE 19PW13\_EMPLOYEE  
 ADD COLUMN Date\_of\_joining DATE;

1. Change the name of the column ID to EID.

ALTER TABLE 19PW13\_EMPLOYEE  
 CHANGE COLUMN ID EID INT NOT NULL;

7. Add not null constraint to City.

ALTER TABLE 19PW13\_EMPLOYEE  
 MODIFY COLUMN City VARCHAR(15) NOT NULL;

8. Remove the Last\_name column from the employee table.

ALTER TABLE 19PW13\_EMPLOYEE  
 DROP COLUMN Last\_name;

9. Create a table dup\_employee using employee (use create table as)

CREATE TABLE 19PW13\_DUP\_EMPLOYEE AS (SELECT *\** FROM employee);

10. Change the name of the table employee to employee\_data.

ALTER TABLE 19PW13\_EMPLOYEE RENAME TO 19pw17\_employee\_data;

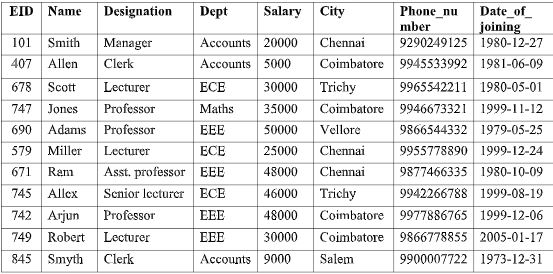
11. Delete the dup\_employee table.

DROP TABLE 19PW13\_DUP\_EMPLOYEE;

1. Display the schema of the employee\_data table. (use desc (or) show columns from).

DESC 19PW13\_employee\_data;

1. Insert the first three records given below into the employee\_data table.



INSERT INTO 19PW13\_employee\_data(EID, Name, Designation, Dept, Salary, City, Phone\_number, Date\_of\_joining)  
VALUES (101, 'Smith', 'Manager', 'Accounts', 20000, 'Chennai', 9290249125, '1980-12-27'),  
 (407, 'Allen', 'Clerk', 'Accounts', 5000, 'Coimbatore', 9945533992, '1981-06-09'),  
 (678, 'Scott', 'Lecturer', 'ECE', 30000, 'Trichy', 9965542211, '1980-05-01');

14. Remove the three records inserted into the employee\_data table using a single SQL

statement.

TRUNCATE TABLE 19PW13\_employee\_data;

15. Write a SQL statement to make sure that no duplicate data against column EID will be

allowed at the time of insertion.

ALTER TABLE 19PW13\_employee\_data  
 MODIFY COLUMN EID INT NOT NULL UNIQUE;

16. Insert all the given data into the employee\_data table using a single SQL statement.

INSERT INTO 19PW13\_employee\_data(EID, Name, Designation, Dept, Salary, City, Phone\_number, Date\_of\_joining)  
VALUES (101, 'Smith', 'Manager', 'Accounts', 20000, 'Chennai', 9290249125, '1980-12-27'),  
 (407, 'Allen', 'Clerk', 'Accounts', 5000, 'Coimbatore', 9945533992, '1981-06-09'),  
 (678, 'Scott', 'Lecturer', 'ECE', 30000, 'Trichy', 9965542211, '1980-05-01'),  
 (747, 'Jones', 'Professor', 'Maths', 35000, 'Coimbatore', 9946673321, '1999-11-12'),  
 (690, 'Adams', 'Professor', 'EEE', 50000, 'Vellore', 9866544332, '1979-05-25'),  
 (579, 'Miller', 'Lecturer', 'ECE', 25000, 'Chennai', 9955778890, '1999-12-24'),  
 (671, 'Ram', 'Asst. professor', 'EEE', 48000, 'Chennai', 9877466335, '1980-10-09'),  
 (745, 'Allex', 'Senior lecturer', 'ECE', 46000, 'Trichy', 9942266788, '1999-08-19'),  
 (742, 'Arjun', 'Professor', 'EEE', 48000, 'Coimbatore', 9977886765, '1999-12-06'),  
 (749, 'Robert', 'Lecturer', 'EEE', 30000, 'Coimbatore', 9866778855, '2005-01-17'),  
 (845, 'Smyth', 'Clerk', 'Accounts', 9000, 'Salem', 9900007722, '1973-12-31');

17. Create a table CBE\_employees (using employee\_data table) that includes the details of

employees who are from Coimbatore city. (use create table as)

CREATE TABLE 19PW13\_CBE\_employees AS (SELECT *\** FROM 19pw17\_employee\_data  
 WHERE City = 'Coimbatore');

18. Create a table Subset\_employee and store only the values of EID, Name, Designation,

and Phone\_number columns of employee\_data table using a single SQL statement.

(use create table as)

CREATE TABLE 19PW13\_Subset\_employees AS (

SELECT EID, Name, Designation, Phone\_number  
 FROM 19PW13\_employee\_data);

19. Add a constraint to the Department column so that the domain values for this column

are restricted Accounts, ECE, EEE, and Maths. (use check constraint)

ALTER TABLE 19PW13\_employee\_data  
 ADD CONSTRAINT Dept\_check CHECK (Dept IN ('Accounts', 'ECE', 'EEE', 'Maths'));

20. Add a constraint to the Salary column so that it takes any value in the range 5000-

50000. (use check constraint)

ALTER TABLE 19PW13\_employee\_data  
 ADD CONSTRAINT Salary\_check CHECK (Salary >= 5000 AND Salary <= 50000);

21. Add a constraint to Phone\_number column to store only distinct values. (use check

constraint).

ALTER TABLE 19PW13\_employee\_data  
 MODIFY COLUMN Phone\_number BIGINT(10) NOT NULL UNIQUE;