1. DDL (Data Definition Language) Questions

Q1: Create a department table with the following columns: dept\_id (PK), dept\_name

(not null), dept\_location.

create table department\_98(dept\_id int primary key, dept\_name varchar(25) not null, dept\_location varchar(25));

Q2: Write a SQL query to create an employee table with the following columns: emp\_id

(PK), emp\_name, emp\_salary (>20k), emp\_join\_date (between June 1998- till

date), dept\_id (FK).

create table Employee\_98(emp\_id INT PRIMARY KEY,emp\_name VARCHAR(25),emp\_salary numeric(10,2) CHECK (emp\_salary>20000),emp\_join\_date DATE CHECK(emp\_join\_date >= date '1998-06-01'),dept\_id INT,FOREIGN KEY(dept\_id) REFERENCES department\_98(dept\_id));

Q3: Create table support table with s\_id (PK), emp\_id (FK), dept\_id (FK), status

(Yes/No).

create table support\_98(s\_id int primary key, emp\_id int, dept\_id int, status varchar(5) check (status IN('Yes','No')),foreign key(emp\_id ) references employee\_98(emp\_id),FOREIGN KEY(dept\_id) REFERENCES department\_98(dept\_id));

Q4: Display the schema of the above three tables.

DESC department\_98;

DESC employee\_98;

DESC support\_98;

Q5: Alter the employee table to add a new column emp\_email of type VARCHAR(100).

Alter table employee\_98 add emp\_email varchar(100);

Q6: Drop the support table if it is no longer required.

drop table support\_98;

Q7: Modify the emp\_salary column in the employee table to allow values up to

DECIMAL(12, 2).

Alter table Employee\_98 modify emp\_salary numeric(10,2);

Q8: Add five suitable records to department table (Let value of dept\_id starts with 101).

insert intO department\_98 values(101,'MCA','SOUTH BLOCK');

insert intO department\_98 values(102,'CE','SOUTH BLOCK');

insert intO department\_98 values(103,'ECE','WEST BLOCK');

insert intO department\_98 values(104,'EEE','WEST BLOCK');

insert intO department\_98 values(105,'MBA','EAST BLOCK');

Q9: Insert the following employee record into the employee table: emp\_id = 1, emp\_name

= 'John Doe', emp\_salary = 60000, emp\_join\_date = '15-05-2021', dept\_id

= 101.

INSERT INTO employee\_98 VALUES (1, 'John Doe', 60000, TO\_DATE('2021-05-15', 'YYYY-MM-DD'), 101, 'johndoe@gmail.com');

Q10: Insert multiple records of employees into the employee table with emp\_id, emp\_name,

emp\_salary, and dept\_id.

insert intO employee\_98 values(2,'Sanju',50000,TO\_DATE('2021-06-15', 'YYYY-MM-DD'), 102, 'sanju@gmail.com');

insert intO employee\_98 values(3,'Amal',65000,TO\_DATE('2021-10-03', 'YYYY-MM-DD'), 103, 'amal@gmail.com');

insert intO employee\_98 values(4,'Kiran',65000,TO\_DATE('2022-12-07', 'YYYY-MM-DD'), 104, 'Kiran@gmail.com');

insert intO employee\_98 values(5,'Ann',60000,TO\_DATE('2022-04-10', 'YYYY-MM-DD'), 105, '[ann@gmail.com](mailto:ann@gmail.com)');

\SQL>insert intO employee\_98 values(2,'Sanju',50000,TO\_DATE('2021-06-15', 'YYYY-MM-DD'), 102, 'sanju@gmail.com');

1 row created.

SQL> insert intO employee\_98 values(3,'Amal',65000,TO\_DATE('2021-10-03', 'YYYY-MM-DD'), 103, 'amal@gmail.com');

1 row created.

SQL> insert intO employee\_98 values(4,'Kiran',65000,TO\_DATE('2022-12-07', 'YYYY-MM-DD'), 104, 'Kiran@gmail.com');

1 row created.

SQL> insert intO employee\_98 values(5,'Ann',60000,TO\_DATE('2022-04-10', 'YYYY-MM-DD'), 105, 'ann@gmail.com');

1 row created.

SQL> select \* from employee\_98;

EMP\_ID EMP\_NAME EMP\_SALARY EMP\_JOIN\_ DEPT\_ID

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EMP\_EMAIL

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1 John Doe 60000 15-MAY-21 101

johndoe@gmail.com

2 Sanju 50000 15-JUN-21 102

sanju@gmail.com

3 Amal 65000 03-OCT-21 103

amal@gmail.com

EMP\_ID EMP\_NAME EMP\_SALARY EMP\_JOIN\_ DEPT\_ID

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EMP\_EMAIL

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4 Kiran 65000 07-DEC-22 104

Kiran@gmail.com

5 Ann 60000 10-APR-22 105

ann@gmail.com

Q11: Update the salary of the employee with emp\_id = 1 by increasing it by 10%.

update employee\_98 set emp\_salary=emp\_salary\*1.10 where emp\_id=1;

Q12: Delete the record of the employee with emp\_id = 1.

delete from employee\_98 where emp\_id=1;

Q13: Update the emp\_salary of employees in dept\_id = 101 to 10% more if their current

salary is less than 50000.

update employee\_98 set emp\_salary=emp\_salary\*1.10 where dept\_id=101 and emp\_salary<50000;

SQL> delete from employee\_98 where emp\_id=1;

1 row deleted.

SQL> update employee\_98 set emp\_salary=emp\_salary\*1.10 where emp\_id=1;

0 rows updated.

SQL> update employee\_98 set emp\_salary=emp\_salary\*1.10 where dept\_id=101 and emp\_salary<50000;

0 rows updated.

SQL> select \* from employee\_98;

EMP\_ID EMP\_NAME EMP\_SALARY EMP\_JOIN\_ DEPT\_ID

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EMP\_EMAIL

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2 Sanju 50000 15-JUN-21 102

sanju@gmail.com

3 Amal 65000 03-OCT-21 103

amal@gmail.com

4 Kiran 65000 07-DEC-22 104

Kiran@gmail.com

EMP\_ID EMP\_NAME EMP\_SALARY EMP\_JOIN\_ DEPT\_ID

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EMP\_EMAIL

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5 Ann 60000 10-APR-22 105

ann@gmail.com