

Name- Barsha Routh

Reg no-24MCA0164

SET-Q

USERNAME-EXAM023@SITEORA

PASWD-EXAM023

Q.

I. Consider the following relational database schema. [5 Marks]

EMPLOYEE(Emp_id, Emp_name, Email, Office_code)

OFFICE(Office_code, City, Phone, State, Country)

II. Write appropriate SQL statements for creating the above tables with necessary

primary key and foreign key. Ensure that the employee can only come from the

country India, USA, Germany, France, Italy, and Britain. [5 Marks]

QUERIES--

```
CREATE TABLE EMPLOYEE(EMP_ID VARCHAR(6),EMP_NAME VARCHAR(8),EMAIL VARCHAR(15),OFC_CODE  
VARCHAR(6));
```

```
CREATE TABLE OFFICE(OFC_CODE VARCHAR(6),CITY VARCHAR(10),PHN_NO NUMBER(10),STATE  
VARCHAR(10),COUNTRY VARCHAR(10));
```

```
SQL> SELECT * FROM EMPLOYEE;
```

EMP_ID	EMP_NAME	EMAIL	OFC_CO
E101	SACHIN	sach2@gmail.com	0101
E102	RITESH	rit@gmail.com	0101
E103	RISHI	rita@gmail.com	0102
E104	RIKHI	rkha@gmail.com	0103
E105	BARSHA	bar@gmail.com	0104
E106	ARTI	ar@gmail.com	0104

6 rows selected.

```
SQL> SELECT * FROM OFFICE;
```

OFC_CO	CITY	PHN_NO	STATE	COUNTRY
0101	FACHEN	9749806802	SANTO	INDIA
0102	LAUREN	9749806801	INVIS	USA
0103	LISTO	9749806800	INOX	USA
0104	CHENNAI	9749806812	TN	INDIA
0105	CHENN	9749806111	UNI	BRITAIN

```
ALTER TABLE EMPLOYEE ADD CONSTRAINT pk_1 PRIMARY KEY(EMP_ID);
```

```
ALTER TABLE OFFICE ADD CONSTRAINT pk_2 PRIMARY KEY(OFC_CODE);
```

```
ALTER TABLE EMPLOYEE ADD CONSTRAINT FK_1 FOREIGN KEY(OFC_CODE) REFERENCES OFFICE(OFC_CODE)  
DEFERRABLE INITIALLY DEFERRED;
```

```
ALTER TABLE OFFICE ADD CONSTRAINT CHECK(COUNTRY IN (India, USA, Germany, France, Italy, Britain));
```

III. Implement SQL statement for the following questions. [10 Marks]

1. Display the employee detail whose name starts with an A.

```
SELECT EMP_NAME FROM EMPLOYEE WHERE EMP_NAME LIKE 'A%';
```

```
SQL> SELECT EMP_NAME FROM EMPLOYEE WHERE EMP_NAME LIKE 'A%';  
  
EMP_NAME  
-----  
ARTI
```

2. Display information about all offices situated in USA.

```
SELECT * FROM OFFICE WHERE COUNTRY='USA';
```

```
SQL> SELECT * FROM OFFICE WHERE COUNTRY='USA';  
  
OFC_CO CITY          PHN_NO STATE    COUNTRY  
-----  
0102   LAUREN          9749806801 INVIS    USA  
0103   LISTO            9749806800 INOX     USA
```

3. One of Office located in 'Chennai' is now decided to shifted its office to 'Bangalore and hence the phone number of the office is also get changed accordingly. Kindly do the necessary changes in the appropriate table.

4. List out how many employees' works in each company.

```
SELECT COUNT(EMP_ID) FROM EMPLOYEE GROUP BY OFC_CODE;
```

```
SQL> SELECT COUNT(EMP_ID) FROM EMPLOYEE GROUP BY OFC_CODE;  
  
COUNT(EMP_ID)  
-----  
1  
2  
1  
2
```

5. Find the employee who works in the city as the employee 'Sachin' works.

```
SELECT SNAME FROM EMPLOYEE WHERE EMPLOYEE.OFC_CODE=(SELECT  
OFC_CODE FROM EMPLOYEE WHERE EMP_NAME='SACHIN');
```

```
SQL> SELECT EMP_NAME FROM EMPLOYEE WHERE EMPLOYEE.OFC_CODE=(SELECT OFC_CODE FROM EMPLOYEE WHERE EMP_NAME='SACHIN');  
  
EMP_NAME  
-----  
SACHIN  
RITESH
```