

Q.N. Consider the following relational schemas.

Student (regno, fullName, age)

Subject (subcode, subName, teacher)

Marks (regno, subcode, marksObtained)

Write a SQL query for:

a) Create above table with primary key and foreign key clearly specified each table. [4]

```
create table Student
(
  regno int primary key,
  fullName varchar(225),
  age int
)

create table Subject
(
  subCode varchar(225) primary key,
  subName varchar(225),
  teacher varchar(225)
)

create table Marks
(
  regno int foreign key references Student(regno),
  subCode varchar(225) foreign key references Subject(subCode),
  marksObtained int
)
```

b) Display student name, subject name, and marks obtained by each students. [2]

```
select fullName, subName, marksObtained from Student
inner join Marks on
Student.regno = Marks.regno
inner join Subject on
Subject.subCode = Marks.subCode
```

OR

```
select Student.fullName, Subject.subName, Marks.marksObtained from Student
inner join Marks on
Student.regno = Marks.regno
inner join Subject on
Subject.subCode = Marks.subCode
```

OR

```
select s.fullName, sb.subName, m.marksObtained from Student s
inner join Marks m on
s.regno = m.regno
inner join Subject sb on
sb.subCode = m.subCode
```

- c) **Display the name of students who has obtained marks 60 to 80.** [2]

```
select s.fullName from Student s
inner join Marks m on
s.regno = m.regno
where m.marksObtained>=60 and m.marksObtained<=80
```

OR

```
select fullName from Student
inner join Marks on
Student.regno = Marks.regno
where Marks.marksObtained>=60 and Marks.marksObtained<=80
```

OR

```
select Student.fullName from Student
inner join Marks on
Student.regno = Marks.regno
where Marks.marksObtained>=60 and Marks.marksObtained<=80
```

- d) **Project the age of students whose name starts from letter 'S' and project the age of student whose name ends with letter 'I'.** [1+1]

```
select age from Student where fullName like 'S%'
```

```
select age from Student where fullName like '%I'
```

- e) **Write a syntax for left outer join in between relation Student & Marks.** [2]

```
select s.regno, s.fullName, s.age, m.marksObtained from Student s
left outer join Marks m on
s.regno = m.regno
```

OR

```
select Student.regno, fullName, age, marksObtained from Student
left outer join Marks on
Student.regno = Marks.regno
```

OR

```
select Student.regno, Student.fullName, Student.age, Marks.marksObtained from Student
left outer join Marks on
Student.regno = Marks.regno
```