

Question 1:

Student:

```
create table Student (StudentID integer,  
StudentName varchar(25) ,  
constraint Student_PK primary key  
(StudentID));
```

Faculty:

```
create table Faculty (FacultyID integer,  
FacultyName varchar(25),  
constraint Faculty_PK primary key  
(FacultyID));
```

Course:

```
create table Course(CourseID varchar(8),  
CourseName varchar(15),  
constraint Course_PK primary key  
(CourseID))
```

Qualified:

```
create table Qualified (FacultyID integer,  
CourseID varchar(8),  
DateQualified date,  
constraint Qualified_FK1 foreign key  
(FacultyID) references Faculty(FacultyID),  
constraint Qualified_FK2 foreign  
key(CourseID) references  
Course(CourseID));
```

Section:

```
create table Section(SectionNo integer,  
Semester varchar(7),  
CourseID varchar(8),  
constraint Section_PK1 primary key  
(SectionNo),  
constraint Section_FK1 foreign key  
(Semester) references  
Registration(Semester),  
constraint Section_FK2 foreign key  
(CourseID) references Course(CourseID));
```

Registration:

```
create table Registration (StudentID  
integer,  
SectionNo integer,  
Semester varchar(7),  
constraint Registration_FK1 foreign key  
(StudentID) references Student(StudentID),  
constraint Registration_FK2 foreign key  
(SectionNo) references Section(SectionNo),  
constraint Registration_PK primary key  
(semester));
```

Question 2:

Employee:

```
create table Employee (SSN integer,  
Bdate date, Address varchar(50), Salary  
integer, Gender char,  
Fname varchar(10), Minit char, Lname  
varchar(15), Dnumber integer,  
Super_SSN integer,  
constraint Employee_PK primary key  
(SSN),  
constraint Employee_FK foreign key  
(Dnumber) references  
Department(Dnumber),  
constraint Employee_FK foreign key  
(Super_SSN) references Employee(SSN));  
  
insert into Employee  
values ('888665555','1927-11-10','450  
Stone, Houston, TX','55000',  
'M','James','E','Borg',1),  
( '333445555','1945-12-08','638 Voss,  
Houston, TX','40000','M',  
'Franklin','T','Wong',5);
```

Department:

```
create table Department (Dnumber  
integer, Dname varchar(20),  
Location varchar(15), Mgr_SSN integer,  
Mgr_StartDate date,  
constraint Department_FK foreign  
key(Location) references Project(Location),  
constraint Department_PK primary  
key(Dnumber));  
  
insert into Department  
values  
( '5','Research','Bellaire','333445555','1978-  
05-22'),  
( '4','Administration',  
'Stafford','987654321','1985-01-01')
```

Project:

```
create table Project (Pname varchar(15),  
Pnumber integer,  
Location varchar(15), Dnumber integer,  
constraint Project_PK primary  
key(Pnumber),  
constraint Project_FK foreign  
key(Dnumber) references  
Department(Dnumber));  
  
insert into Project  
values ('ProductX',1,'Bellaire',5),  
( 'ProductY',2,'Sugarland',5)
```

Dependent:

```
create table Dependent (Emp_SSN integer,  
DependentName varchar(10),  
  
Gender char, Bdate date, Relationship  
varchar(10),  
  
constraint Dependent_PK primary  
key(DependentName),  
  
constraint Dependent_FK foreign  
key(Emp_SSN) references Employee(SSN));  
  
insert into Dependent  
values ('333445555','Alice','F','1976-04-  
05','Daughter'),  
  
('987654321','Abner','M','1932-02-  
29','Spouse')
```

Dept_Locations:

```
create table Dept_Locations (Dnumber  
integer, Dlocation varchar(15),  
  
constraint Dept_Locations_PK primary  
key(Dlocation),  
  
constraint Dept_Locations_FK foreign  
key(Dnumber) references  
Department(Dnumber));  
  
insert into Dept_Locations  
values ('1','Houston'), ('4','Stafford')
```

Works_On:

```
create table Works_On (Emp_SSN integer,  
Pnumber integer, Hours double,  
  
constraint Works_On_FK foreign  
key(Emp_SSN) references Employee(SSN),  
  
constraint Works_On_FK foreign  
key(Pnumber) references  
Department(Dnumber));  
  
insert into Works_On  
values  
('123456789',1,32.5),('666884444',3,40)
```