Solution Quiz #2

Database Systems

BESE 15

Max Marks 10

Given the following relation schema

Student(id, name)

Enrolled(id, code)

Subject(code, lecturer)

Write relational algebra queries for the following:

1. Find the names of the students taking 'CPS480'.

$$\pi_{\textit{name}}(\sigma_{\textit{student}.\textit{ID}=\textit{enrolled}.\textit{id}}(\sigma_{\textit{code}='\textit{CPS}\,480'}(\textit{student} \times \textit{enrolled})))$$

2. Find the subject that 'Haider' is taking.

$$\pi_{code}(\sigma_{student.ID=enrolled.id}(\sigma_{name='Haider'}(student \times enrolled)))$$

3. Who is teaching 'EE481'.

$$\pi_{lecturer}(\sigma_{code='EE481'}(subject))$$

4. Find the lecturers teacing 'CPS480' or 'EE481'.

$$\pi_{lecturer}(\sigma_{code='EE481'\lor code='CPS480'}(subject))$$

5. Find the names of all students.

$$\pi_{name}(student)$$