

The University of British Columbia
Computer Science 304

Midterm Examination
March 2, 2012

Time: 50 minutes

Total marks: 60

Instructor: Rachel Pottinger

Name _____ Student No _____
(PRINT) (Last) (First)

Signature _____

This examination has 3 doublesided pages.

Check that you have a complete paper.

This is a closed book, closed notes exam. No books or other material may be used.

Answer all the questions on this paper.

Give very **short but precise** answers.

State any assumptions you make

Work fast and do the easy questions first. Leave some time to review your exam at the end.

Good Luck

Question	Mark	Out of
1.a		10
1.b		10
2.a		10
2.b		10
2.c		10
2.d		10
TOTAL		Out of 60

The schema again:

Student(snum: integer, sname: string, major: string, level: string, age: integer)

Class(name: string, meets_at: string, room: string, fid: integer)

Enrolled(snum: integer, cname: string)

Faculty(fid: integer, fname: string, deptid: integer)

2. {40 marks} **SQL Queries. For each query return EXACTLY the following (i.e., remove duplicates from your final answers where they are not explicitly requested, and include no extra columns):**
 - a. Find the name of the faculty member(s) who taught the most number of unique students and how many students they taught

The schema again:

Student(snum: integer, sname: string, major: string, level: string, age: integer)

Class(name: string, meets_at: string, room: string, fid: integer)

Enrolled(snum: integer, cname: string)

Faculty(fid: integer, fname: string, deptid: integer)

- b. Find an alphabetical list of the names of all students who have not taken a class taught by the faculty member with ID 489456522

The schema again:

Student(snum: integer, sname: string, major: string, level: string, age: integer)

Class(name: string, meets_at: string, room: string, fid: integer)

Enrolled(snum: integer, cname: string)

Faculty(fid: integer, fname: string, deptid: integer)

- c. List each major majored in by at least 2 students whose student IDs begin with “3”

The schema again:

Student(snum: integer, sname: string, major: string, level: string, age: integer)

Class(name: string, meets_at: string, room: string, fid: integer)

Enrolled(snum: integer, cname: string)

Faculty(fid: integer, fname: string, deptid: integer)

- d. Find the names of all students who are enrolled in two classes that meet at the same time