

EASTERN UNIVERSITY, SRI LANKA
SECOND EXAMINATION IN SCIENCE - 2003/04 (Repeat)
SECOND SEMESTER (June/July, 2005)



CS253 - Practical Work on CS203

Answer All Questions

Time Allowed: 2 Hours

Q1.

Consider the University database given below, where the primary keys shown in bold:

Student(**StNumber**, StName, StCity, StMajor, StClass, StGPA)

Staff(**StaffNumber**, StaffName, StaffCity, StaffDepartment, StaffRank, StaffSalary, StaffSupervisor, StaffHireDate)

Offering(**OffNumber**, CourseNumber, OffTerm, OffYear, OffLocation, OffTime, StaffNumber, OffDays)

Course(**CourseNumber**, CourseName, CourseUnits)

Enrollment(**OfferNumber**, **StNumber**, Grade)

- A) Design tables for the above relations and give some sample records.
- B) Design forms for all the tables designed in part (A).
- C) Write statements in **SQL** to do each of the following (state clearly any assumption you would like to make):
 - (a) Retrieve the name, grade, and GPA of students with a high GPA (greater than or equal to 3.7).
 - (b) List the name, city, and salary of staff hired after 1991.
 - (c) List the student names (without duplicates) who have a grade greater than or equal to 3.5 in a course offering.
 - (d) List staff members who have a higher salary than their supervisor. List the staff number, the name, and the salary of the staff member and the supervisor.
 - (e) List the course number, the offering number, and the number of students enrolled. Only include courses offered in spring 2000.

[to be continued...]

[Continuation...]

- (f) List the course number, the offering number, and the average GPA of students enrolled. Only include courses in which the average GPA of enrolled students is greater than 3.0.
- (g) Show all staff and students. Only show the common columns in the result.
- (h) Insert a row into the Student table supplying values for all columns.
- (i) Give staff members in the MS department a 10 percent rise.
- (j) Delete offerings taught by Leonard.