CSCE 520 – Spring 2004
Midterm Examination
March 26, 2004

Name:_____

There are a total of 3 questions and 50 points on this examination. Points for each question are shown beside the question. If you think a question is ambiguous, make and state a reasonable assumption. The exam is closed book and closed notes. The use of calculators and similar-looking electronic devices is not allowed. Show your work for possible partial credit. Answer all questions on this exam paper. There is an extra sheet of paper at the end if you need more space for answers or for scratch paper.

1. (10) Briefly define each of the following terms in the context of this course.

    a. Cascading delete

    b. Combo box

    c. Report footer

    d. Reflexive join

    e. Switchboard form

2. (10) Consider the following form that might be used by a shipping company to keep track of employee records. Assume that an employee may have multiple pieces of equipment checked out. Also assume that the cell phone and office belong to the employee, not his/her manager. Construct a class diagram and a set of appropriately normalized relations to represent the information in this form. Specify what normal form your relations are in.

3. (30) Write SQL queries for Sally's Pet Store for the following requests. A copy of the database schema is attached.

a. How many hamsters are in the animal list?

b. List in alphabetical order the names of all customers who bought something (animals and/or merchandise) from the store last year.

c. Do registered dogs have a higher average sale price than unregistered dogs?

d. Which animals do not have a Web photo (image file)? List the AnimalID, name, and category; exclude all fish.

e. Create a view called Cats that contains all attributes (including Category) in the Animal table, but only for the cats.

f. List all animals that have not been sold.