CIS 4100 Systems Design and Administration I
Fall 2004 - Written Exam

Instructions:

- Answer each question as instructed.

- No reference material may be used.

- The value of each question is listed in () after the question number.

- You may or may not want to answer the questions in the order they are asked.

Questions:

1. (20) Clearly describe partitioning, file system creating, mounting, and unmounting of disks. Include options available for each operation.

2. (20) Explain the need for users and user groups in operating systems. Include a description of the 9 main file permission bits used in unix filesystems.

3. (20) A computer user in Florida tries to visit a web site by typing in the name of the computer, `www.dsctux.net`. Clearly describe all steps of the process for the computer name to be translated into an IP address.

4. (20) An email account at `yahoo.com` is used to send email to `wilma@yourdomain`. Clearly describe the process used to transmit the email and store it in `wilma`'s mail box.

5. (20) A customer's organization needs to have an internet presence. For each of the following functions, clearly describe the services to be installed, and the configuration required to meet the organization's needs.

- Dynamic web content creation using stored data.

- Web forms to recieve data from internet users.

- Downloads of large files by internet users.

- Communications with internet users via email.

- Multiple DNS names for the internet site.