

## Operating Systems

### Spring 2015 – Quiz 1

1. List and describe two (2) main duties of an operating system:

In general,

- Manage the resources of the computer
  - o Share resources among multiple users
  - o Protect resources and users from other users
  - o Etc.
- Create a layer of abstraction over the hardware details of computers

2. Draw a typical memory hierarchy, identifying at least three (3) of the levels.

From small, fast and expensive to large, slow and cheap:

Registers

Cache

Main Memory

Disk

3. What is a UNIX shell?

A command interpreter for UNIX that reads and executes commands from an command-line or from a file of commands (a shell script) for the user.

4. Briefly describe what the following shell commands do:

`cd` – change directory (change the current working directory)

`ls` – list file(s) in a directory

`rm` – remove file(s) from a directory