CS 2750	Advanced Programming in Unix	Test 1
Name:	Fall 2007	Maximum Points: 38

Important: This is an open book test. You can use any books, notes, or paper but no electronic device. *Do not log into the computer during the test, or use any electronic or communications device. Switch off your cell phones*. Any calculations and rough work can be done on the back side of the test pages. If there is a syntax error in any program segment, just write it down and you will get full credit for the problem. You will lose five points for not writing your name.

1. [5 pt] I want to look at the man page of getopt function to use in C. However, when I type man getopt, I get the man page of the shell command. How do I access the right man page?

2. [6 pt] I just created a new script named test in my current directory. Whenever I execute this script, I get my shell prompt back with no output from the printer. The exit status returned by the script is always 1. I checked and the current directory is the first entry in my path. What is going wrong? How can I fix it?

3. [6 pt] Give at least one reason as to why we should not be using csh for writing shell scripts.

4. [5 pt] Describe the structure of Unix, showing different components starting from hardware to the user.

5. [4 pt] You are given a file named foobar. You have to search for a pattern color in this file. However, the user does not want to see any error messages or even the line that may contain the pattern. All the user wants printed on screen is either of the two following lines:

foobar contains color. foobar does not contain color.

How will you achieve this?

6. [8 pt] You are given a variable called fubar in ksh. Write commands to do the following: Find out if the variable is instantiated. If it is not instantiated, print a message saying so on stderr. If it is instantiated, find out if it is a number. If it is a number, add 2 to it and print its value after addition.

7. [4 pt] How do you delete a paragraph in vi?