EE 40 **Name:_____**
Pre-Lab: RC Filters and LabVIEW **TA:_____**
Session:_____

1. In this lab you will explore the two RC filters shown in the **Description and Background** section of the **Experiment Guide**. Derive the equations (1) and (2) of the transfer functions for the filters of Fig. 1 and Fig. 4.

2. If the ordinary frequency, in Hz, for a sinusoidal signal is 100 Hz, what is the corresponding angular frequency of that signal (both magnitude and units)?

3. What will be the frequency range you choose to plot the transfer function in order to see the filter feature (LPF or HPF)? How do you determine the range?

4. Give one way of finding out the GPIB address of the multimeter.

5. Derive the transfer function for the circuit in Figure 6. What is the resonant frequency equal to? What is the quality factor? What is the bandwidth?