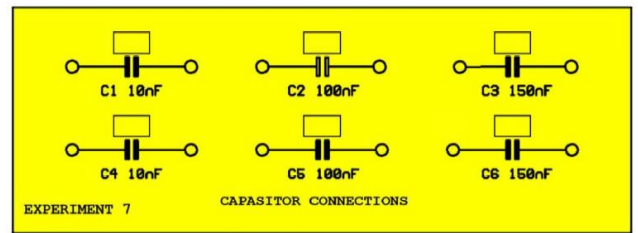
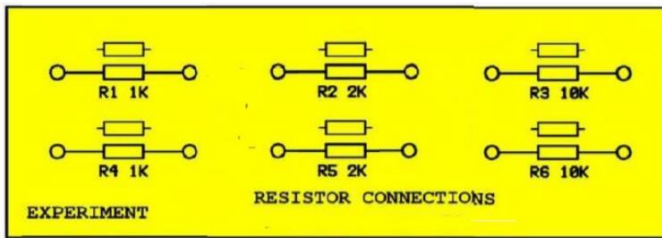
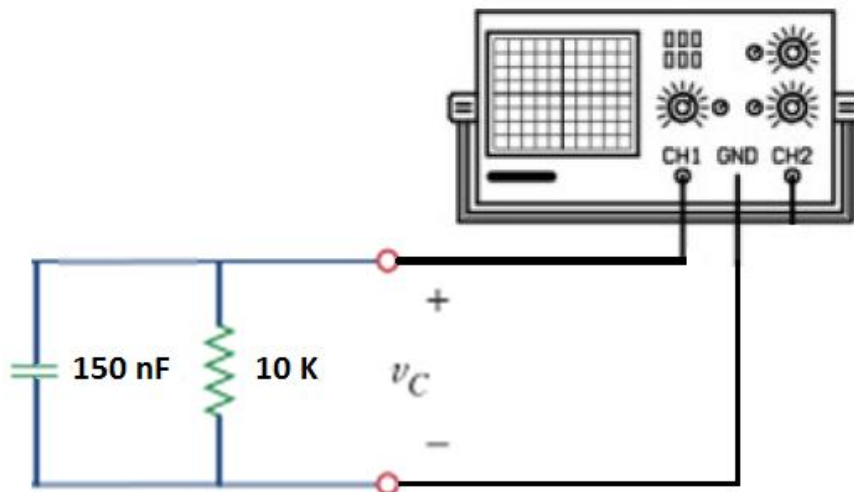


Experiment 9.1. RC Circuit Analysis

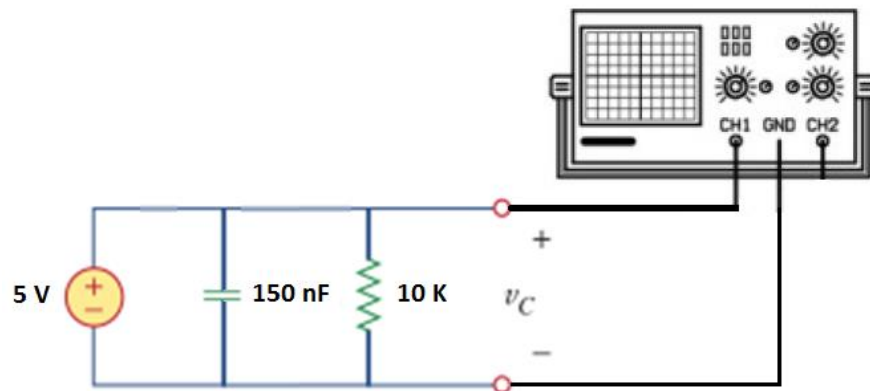
Use the **Y-0016/003** module for this experiment



1. Setup the following circuit to discharge the capacitor. Connect oscilloscope and adjust the scan time to 500ms. Observe zero voltage at the capacitor.



2. Connect 5 V power supply to the circuit as shown.



Observe the charging waveform and measure the time to charge the capacitor using oscilloscope compare it with theoretical calculation. Draw the charging waveform.

3. Disconnect the power supply and observe the discharging waveform and measure the time to discharge the capacitor using oscilloscope compare it with theoretical calculation. Draw the discharging waveform.

4. Repeat the same experiment with 10 nF Capacitor with 1 K Ω Resistor.