Experiment 4:

RC and RLC Circuits

In-Lab Report

A. Phase Shift Measurements

- Measure the phase shift between the input voltage and output voltage of the circuit in figure 1 using YπT format and the XπY format (lissajous)

Calculated Phase Shift		
YπT Format ɲ	T=	T=
Lissajous Figure	2B=	2A=

B. Lead and Lag Networks

- Measure and draw (using Paint) the output voltage of the lag and lead networks in figure 3 and 4 if a 1 $V_{PkπPk}$ Square signal is applied to the input. Below are the frequencies.

Lead Network (Measured)		
Frequency	Input Voltage	Output Voltage
100Hz	1 $_{VPkπPk}$	
1KHz	1 $_{VPkπPk}$	
10KHz	1 $_{VPkπPk}$	

Lag Network (Measured)		
Frequency	Input Voltage	Output Voltage
100Hz	1 $_{VPkπPk}$	
1KHz	1 $_{VPkπPk}$	
10KHz	1 $_{VPkπPk}$	