PHYS222 Results RC Time Constant Experiment

Part 1 Results

680 K ohm Resistor and 47 μ F capacitor

Method	RC time (τ) (sec)	% diff (w.r.t. ideal Voltmeter)	2xRCtime(2τ) (sec)	% diff (w.r.t. ideal Voltmeter)
Color code $(0.680 \text{M} \Omega \text{ x47 } \mu \text{ F})$				
R _{DMM} times C _{DMM} (ideal voltmeter)		XXXXXXXXX		XXXXXXXX
R _{eq} times C _{DMM} (real voltmeter)				
Cartesian plot				
Semi-log plot				XXXXXXXX

Part 2 Results

1.80 M ohm Resistor and 47 μ F capacitor

Method	RC time(\(\tau\)) (sec)	% diff (w.r.t. ideal Voltmeter)	2xRCtime(2\tau) (sec)	% diff (w.r.t. ideal Voltmeter)
Color code (1.80 M Ω x 47 μ F)				
R _{DMM} times C _{DMM} (ideal voltmeter)		XXXXXXXXX		XXXXXXXX
R _{eq} times C _{DMM} (real voltmeter)				
Cartesian plot				
Semi-log plot				XXXXXXX