

Name: _____

Date: _____

Partner: _____

Part 1) Value of your capacitor: $C =$ _____ nF

Value of your resistor: $R =$ _____ Ω

Amplitude of your function generator: $V_0 =$ _____ V

Time constant of circuit: $\tau =$ _____ ms

Part 2) Frequency of your function generator: $f =$ _____ kHz

Period of your function generator: $T =$ _____ ms

Part 3) Scope setting: *vertical* = _____ volts/div

Scope setting: *horizontal* = _____ ms/div

Amplitude cursors: $V_{pp} =$ _____ V

Time cursors: time when $V = V_{pp}/e$ $\tau =$ _____ ms

Part 4) New value of capacitor: $C =$ _____ nF

New time constant of circuit: $\tau =$ _____ ms

New frequency of your function generator: $f =$ _____ kHz

Log plot in Excel: $\tau =$ _____ ms

Part 5) New frequency of your function generator: $f =$ _____ kHz

New time constant of circuit: $\tau =$ _____ ms

Apparent resistance: $R =$ _____ Ω

Part 6) Test capacitance: $C =$ _____ nF