I. Pure Sinusoids

1. Draw the signal from part B1 (label both axes with the proper units and scale).

![](image1)

2. What is the lowest frequency you can hear?

3. Draw the signal from part B3.

![](image2)

What is the beat frequency?

II. Filtered Signals

1. Resistance of pot for output amplitude to be half the input amplitude?

2. Observations of filtered signals (how does filtering ability change as frequency changes, does it start attenuating at $f=1/(RC*2*\pi)$?)

III. Filtered Music

1. Can you filter the high frequency components of the music? Describe your results.

2. Describe or draw the difference between your input and output waveforms when filtering out high frequency components.