**QUESTIONS TO HAND IN – EXPERIMENT 2**

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**LAB INSTRUCTOR\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_LAB DAY/TIME\_\_\_\_\_\_\_\_\_\_ \_ \_\_**

**1.** A pure musical tone is sounded at a frequency *f* of 440 hertz. What is the wavelength *l*? (Take the speed of sound as 340 m/s.)

**2.** What is the third harmonic of the above sound?

**3.** A piano and a trumpet play exactly the same note. Briefly explain why one can immediately tell the difference between the two instruments.

**4.** Briefly describe the difference between a transverse and a longitudinal wave.

**5.** When sound travels through the air, what is the “disturbance” that propagates as a wave?