

Name: \_\_\_\_\_ Date & Time of Practical: \_\_\_\_\_.

Student Number: \_\_\_\_\_ Name of your TA1: \_\_\_\_\_.

## Pre-Practical Question Sheet 10

**Instructions:** Please print this page, fill out brief answers to the questions below, and turn in the sheet to the box at the front when you arrive to Practicals this week. (Alternatively, you may write out the answers on a blank piece of paper. In this case, be sure to put your name, date & time of Practical at the top, and clearly number each question you are answering.)

1. You are 10 m from one speaker and 11 m from another. If these two sources are both playing pure tone sine waves with the same frequency and are **in phase**, what is the maximum wavelength that places you in a spot of
  - a. constructive interference?
  
  
  
  
  
  
  
  
  
  
  - b. destructive interference?
  
2. Is it safe to shine a laser directly into your eye, while trying not to blink or look away?
  
  
  
  
  
  
  
  
  
  
3. What has a higher frequency, a red laser or a green laser?
  
  
  
  
  
  
  
  
  
  
4. What has a longer wavelength, a blue laser or a green laser?

Mark out of 2: