**Lab 5 Question Sheet: Student Name:**

**Id Number:**

**Lab Stream:**

**Question 1** (0.5 points): Translate our ecological hypothesis (“Is the growth rate of barley (*Hordeum vulgare*) influenced by the addition of water and/or fertilizer?”) into a statistical hypothesis.

**Question 2** (2 points): What can we conclude from our Bartlett and Shapiro tests? Should we be running an ANOVA on our data?

**Question 3** (0.5 points): What statistical test is equivalent to an ANOVA on two groups of data?

**Question 4** (2 points): Enter the ANOVA summary tables here: What can we conclude statistically from the data?

**Question 5** (1 point): Enter your two way ANOVA summary table here: What can we conclude statistically from this data?

**Question 6** (2 points): What are the overall biological conclusions for our analysis (both sets of ANOVAs run)?

**Part 2: Your own analysis:** Include your hypothesis, statistical hypothesis, summary table, statistical conclusion and biological conclusion. (6 points)