2025 Fall BIOL 1209

Quiz 02

Name: _____

Section: _____

Date: _____

Time: 10 min

Max. points: 10

1. In your last lab you used an AMP like PopGen to obtain a graph of fitness vs p(A) for a population. **(2 pt)**

a. What was the dependent variable for this experiment?

b. What was your null hypothesis for this experiment?

2. What

   are two values you can use to plot error bars on a graph, and what do the bars represent in each case? **(3 pt)**

3. Explain two ways in which population size affects evolutionary change (i.e., allele frequencies). **(2 pt)**

4. The ability to taste phenylthiocarbamide (PTC) in humans is determined by a gene with two alleles T and t. Human beings carrying the dominant allele T can taste PTC. In a population in which the frequency of

this allele T is 0.4, what is the frequency of successful tasters, assuming it follows Hardy-Weinberg equilibrium? **(3 pt)**