

2025 Fall BIOL 1209

Quiz 05

Name: _____

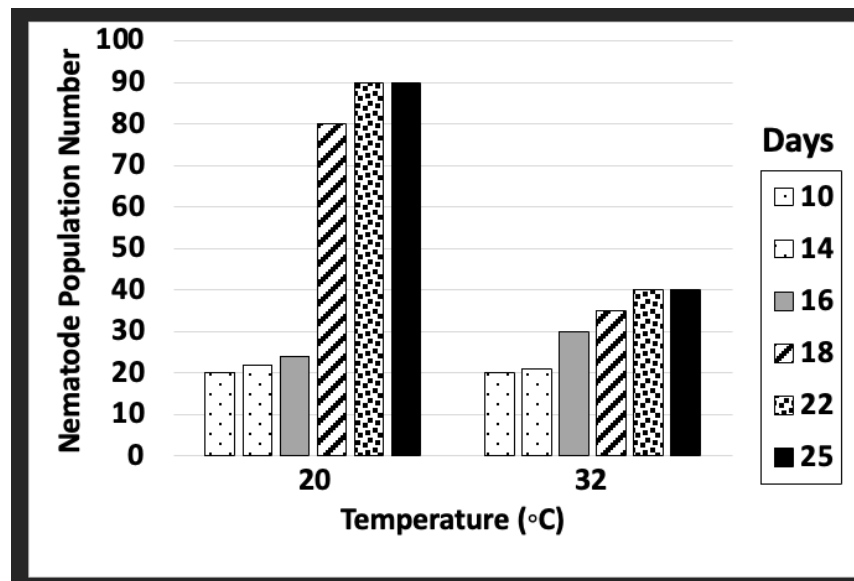
Section: _____

Date: _____

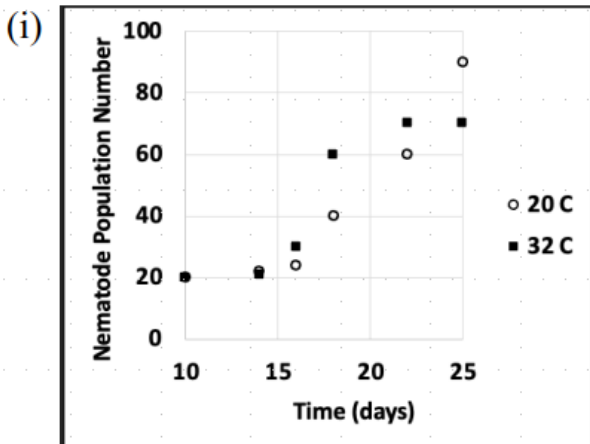
Time: 10 min

Max. points: 10

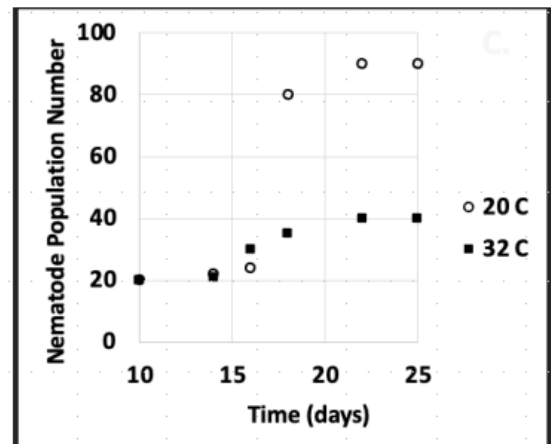
1. Using the bar graph below, answer the following questions.



- a. Which of the two population growth curves below is equivalent to the bar graph? (1 pt)



(ii)



- b. Is the 20°C growth curve logistic or exponential? What about the 32°C growth curve? (2 pt)

- c. Is temperature a limiting factor in this example? (1 pt)

2. A scientist decided to measure growth of the alga, *Volvox*, with a spectrophotometer. They grew the *Volvox* in minimal media (Min) with 15 mM potassium at 37°C. They also added 0, 5, or 10 mM manganese to test whether it is a limiting factor.
- a. List all components required in the control. **(2 pt)**
 - b. How many blanks do they need? **(1 pt)**
 - c. Which component(s) differs amongst all the blanks? **(1 pt)**
3. Using the data below, plot a population growth curve, and also mention whether it is logistic or exponential. **(2 pt)**

Population size (# individuals)	Time (years)
10	0
20	5
50	10
100	15