

# 2025 Fall BIOL 1209

## Quiz 05

Name: \_\_\_\_\_

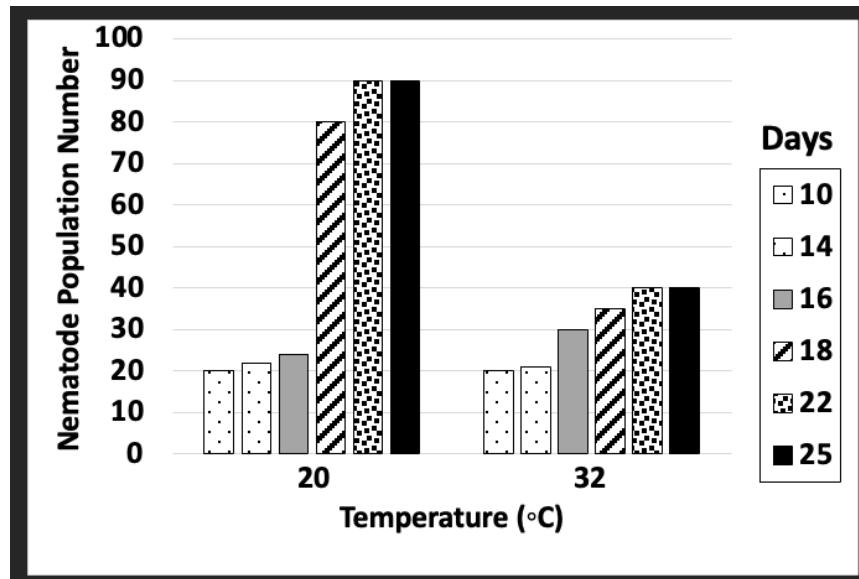
Time: 10 min

Section: \_\_\_\_\_

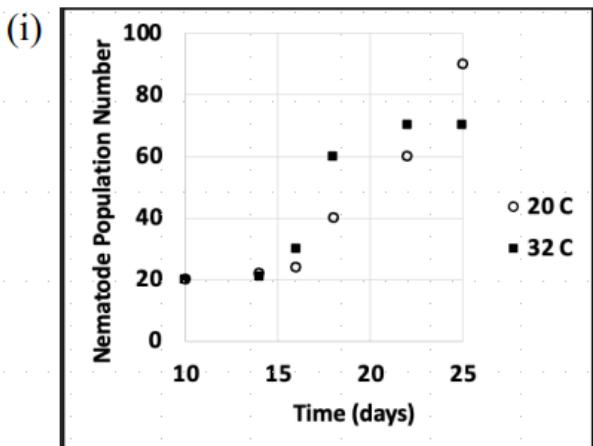
Date: \_\_\_\_\_

Max. points: 10

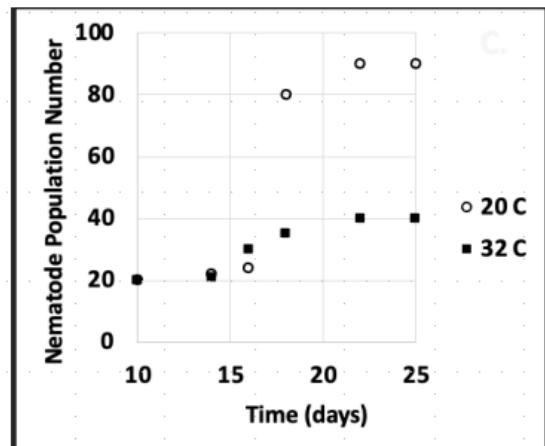
- Using the bar graph below, answer the following questions.



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



(ii)



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

- 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.
- List all components required in the control. (2 pt)
  - How many blanks do they need? (1 pt)
  - 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