

Brett Robbins Academic Consulting

Biology 30 Practice Test

Unit D: Population & Community Dynamics

5 Questions

Original practice questions written to the Alberta curriculum, in the style of past diploma examinations. Work through each question, then check your answers with the key at the end.

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, contact Brett for clarification.

Question 1

Which of the following is a density – dependent factor that could limit the growth of a population of nesting birds?

- A) A flood that destroys nests along a riverbank
- B) A drought that reduces the growth of seed – producing plants
- C) Competition for nesting sites that increases as the population grows
- D) A late frost that kills insects eaten by the birds

Question 2

A small population of rabbits is introduced to an island where food is abundant and there are no predators. At first, the population grows rapidly and the growth curve does not level off. The growth pattern and the shape of the growth curve are, respectively,

- A) logistic and S – shaped
- B) exponential and J – shaped
- C) logistic and J – shaped
- D) exponential and S – shaped

Question 3

After a glacier retreats, lichens are the first organisms to grow on the newly exposed rock. In ecological succession, the lichens are described as

- | | |
|--------------------|---------------------|
| A) pioneer species | B) climax species |
| C) seral species | D) keystone species |

Question 4

In a population that is in Hardy – Weinberg equilibrium, the frequency of the dominant allele is 0.7. The frequency of the homozygous dominant genotype is

- A) 0.09
- B) 0.42
- C) 0.70
- D) 0.49

Question 5

A clownfish lives among the stinging tentacles of a sea anemone. The clownfish is protected from predators, and the anemone receives nutrients from waste produced by the clownfish. This relationship is an example of

- A) mutualism
- B) parasitism
- C) commensalism
- D) competition

Answer Key

- | | | |
|------|------|------|
| 1. C | 3. A | 5. A |
| 2. B | 4. D | |

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