

APOLLO

Ecological niches

HL

Biology

First assessment 2025

3 questions | questions

35. What occurs during competitive exclusion between two species?

- I. They compete for the same resources so cannot coexist in the same niche.
 - II. Competing species are regulated by predators in the ecosystem.
 - III. Both species are restricted to a part of their fundamental niche.
- A. I and II only
 - B. I and III only
 - C. III only
 - D. I, II and III

Turn over

36. What describes a benefit of the relationship between coral and zooxanthellae?

- A. Zooxanthellae receive carbon dioxide from the coral.
- B. Zooxanthellae receive glucose from the coral.
- C. Coral receives carbon dioxide from the zooxanthellae.
- D. Coral receives protection from the zooxanthellae.

36. The preferred temperature ranges for three species of trout that are found together in freshwater lakes in North America are shown.



Lake trout
(*Salvelinus namaycush*)
6–13 °C



Rainbow trout
(*Oncorhynchus mykiss*)
12–18 °C



Brown trout
(*Salmo trutta*)
11–23 °C

What can be deduced from this information?

- I. The niches for all three species overlap.
 - II. Brown trout have the most specialized niche.
 - III. Lake trout can avoid competition by living in colder water.
- A. I only
- B. II only
- C. I and III only
- D. I, II and III