



Complex MCQs on Ecotone

1. Which of the following best describes the edge effect in an ecotone?

- a) Increased species diversity at the core of two ecosystems
- b) Higher species diversity and population density at the boundary of two ecosystems
- c) Reduction in species diversity due to competition at the boundary
- d) Uniform distribution of species across the boundary and adjacent ecosystems

Answer:

- b) Higher species diversity and population density at the boundary of two ecosystems
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2. In an ecotone between a forest and a grassland, which of the following species is most likely to thrive?

- a) A species that relies exclusively on grassland resources
- b) A generalist species that can exploit resources from both ecosystems
- c) A predator that requires dense forest for hunting
- d) A species adapted to a single ecosystem with no tolerance for overlap

Answer:

- b) A generalist species that can exploit resources from both ecosystems
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3. Which of the following factors is least likely to influence the formation of an ecotone?



- a) Topography and soil gradients
- b) Climatic variations
- c) Human-induced activities such as agriculture
- d) Genetic diversity within a single species

Answer:

- d) Genetic diversity within a single species
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4. Which of these is a distinguishing feature of ecotones compared to core ecosystems?

- a) Uniformity in ecological conditions
- b) Presence of endemic species exclusive to one ecosystem
- c) Presence of species from adjacent ecosystems and unique transitional species
- d) Lower resilience to environmental disturbances compared to the core

Answer:

- c) Presence of species from adjacent ecosystems and unique transitional species
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5. What is the primary ecological significance of ecotones in biodiversity conservation?

- a) They restrict the movement of species between ecosystems, preserving their integrity.
- b) They act as buffer zones that mitigate the impact of disturbances on adjacent ecosystems.
- c) They limit genetic exchange between populations of different ecosystems.
- d) They stabilize environmental conditions, making them uniform across ecosystems.



Answer:

b) They act as buffer zones that mitigate the impact of disturbances on adjacent ecosystems
