

CAREER CAMPUS

LOGICAL REASONING

1. Extinction is a process that can depend on a variety of ecological, geographical, and physiological variables. These variables affect different species of organisms in different ways, and should, therefore, yield a random pattern of extinctions. However, the fossil record shows that extinction occurs in a surprisingly definite pattern, with many species vanishing at the same time.
Which of the following, if true, forms the best basis for at least a partial explanation of the patterned extinctions revealed by the fossil record?
- A) Major episodes of extinction can result from widespread environmental disturbances that affect numerous different species.
 - B) Certain extinction episodes selectively affect organisms with particular sets of characteristics unique to their species.
 - C) Some species become extinct because of accumulated gradual changes in their local environments.
 - D) In geologically recent times, for which there is no fossil record, human intervention has changed the pattern of extinctions.
 - E) Species that are widely dispersed are the least likely to become extinct
2. Extinction is a process that can depend on a variety of ecological, geographical, and physiological variables. These variables affect different species of organisms in different ways, and should, therefore, yield a random pattern of extinctions. However, the fossil record shows that extinction occurs in a surprisingly definite pattern, with many species vanishing at the same time.
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3. Commercially available chemical fertilizers contain the same nutrients and micronutrients as organic fertilizers such as manure and composted garden clippings. Plants have tiny root hairs that absorb nutrients, and whether the source of the nutrients is organic or chemical is irrelevant to the plant's ability to take in the nutrients. Nevertheless, organic fertilizers are better for the health of the plant than are chemical fertilizers alone.
Which of the following, if true, would most strongly support the position above?
- A) The nutrients in organic fertilizers are slowly released to the plant over time, rather than being absorbed by the plant immediately.
 - B) In organic fertilizers, the natural combination of nutrients with other natural materials makes the nutrients more usable by the plant than nutrients found in chemical fertilizers.
 - C) Plants often must be provided with nutrients because naturally occurring nutrients in the surrounding soil are depleted or washed away over time.
 - D) The typical gardener can't easily know the exact amount and type of nutrients in an organic fertilizer such as manure.
 - E) Chemical fertilizers produced by the leading manufacturer contain nutrients that are no harder for the plants to absorb than those provided by the competitor's chemical fertilizer.