

CHAPTER 14

INTERACTIONS IN ECOSYSTEMS

Chapter Test A

Multiple Choice

Choose the letter of the best answer. (15 credits)

- _____ 1. Zebras live on the savannas of Africa. A watering hole on the savanna would be part of a zebra's
 - a. biotic factors.
 - b. niche.
 - c. habitat.
 - d. behavior.

- _____ 2. When two species compete for the same resource, they sometimes divide this resource. This is an example of
 - a. niche partitioning.
 - b. niche equivalency.
 - c. evolutionary response.
 - d. ecological equivalence.

- _____ 3. The mantella frog and poison dart frog occupy similar niches in similar habitats in different parts of the world. Because of this, they are considered to be
 - a. competitors.
 - b. the same species.
 - c. interacting populations.
 - d. ecological equivalents.

- _____ 4. Hawks and foxes compete to eat field mice. This is a form of
 - a. interspecific competition.
 - b. competitive exclusion.
 - c. intraspecific predation.
 - d. random dispersion.

- _____ 5. What word or phrase would be most appropriate opposite "Commensalism" under "Organism 2"?

Symbiosis 1	Organism 1	Organism 2	Example
Mutualism	Benefits	Benefits	Bee/Flowering Plant
Commensalism	Benefits		Human/Eyelash Mite
Parasitism	Benefits	Is Harmed	Dog/Flea

FIG. 14.1

- a. may die over time
 - b. neither benefits nor is harmed
 - c. benefits
 - d. is harmed
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- _____ 6. Which of these is an example of parasitism?
 - a. A lion defends its territory.
 - b. A squirrel stores food in a tree hole.
 - c. A leech feeds on a host's blood.
 - d. A polar bear kills and eats a seal.

 - _____ 7. To measure population density, you must divide the number of individuals living in a defined space by the
 - a. perimeter of the area.
 - b. area of the space.
 - c. birth and death rates.
 - d. carrying capacity.

CHAPTER TEST A, CONTINUED

- _____ 8. Nesting birds often space themselves evenly from other nests. This pattern is called
- clumped dispersion.
 - uniform dispersion.
 - random dispersion.
 - type I dispersion.
- _____ 9. Which type of organism would be most likely to have a type II survivorship curve?
- one that protects and cares for its young
 - one that preys on small mammals
 - one that is preyed upon throughout its life
 - one that has high birth and infant mortality rates
- _____ 10. Which of the following will increase the size of a population?
- emigration and deaths
 - immigration and deaths
 - emigration and births
 - immigration and births
- _____ 11. Which of the following is a density-dependent limiting factor?
- natural disaster
 - unusual weather
 - human activities
 - competition

- _____ 12. What type of population growth is shown in the graph?

DAPHNIA POPULATION GROWTH

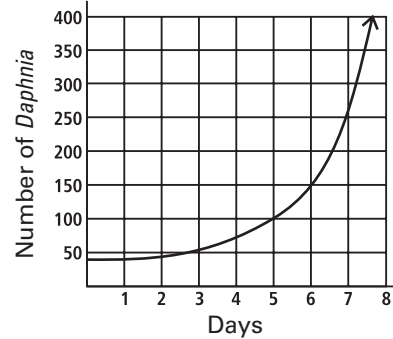


FIG. 14.2

- logistic growth
 - exponential growth
 - density-dependent growth
 - carrying capacity growth
- _____ 13. Hawaii's lush tropical forests arose from a process of
- succession.
 - predation.
 - regeneration.
 - destruction.
- _____ 14. Pioneer species are the first
- trees to grow in an area that has been disturbed.
 - trees that replace the original trees after a forest fire.
 - organisms to live in previously uninhabited areas.
 - organisms to live in a forest canopy.
- _____ 15. The reestablishment of a damaged ecosystem in an area where the soil is intact is called
- primary succession.
 - secondary succession.
 - pioneer succession.
 - symbiotic succession.