

Bio-Q1W3-Test 1

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ____ 1. Which of the following might be a limiting factor in an organism's survival?
- a. Temperature
 - b. Food availability
 - c. Abundance of predators
 - d. All of the above
- ____ 2. Certain bacteria are able to thrive in extremely acidic environments where most organisms could not survive. This is an example of different organisms having different —
- a. tolerances.
 - b. biotic factors.
 - c. abiotic factors.
 - d. None of the above
- ____ 3. After a community is disrupted by large-scale events, such as forest fires, a new community is established through the process of —
- a. primary succession.
 - b. secondary succession.
 - c. soil formation.
 - d. None of the above
- ____ 4. Within aquatic biomes, there are many different environments where different types of organisms thrive. In general, aquatic biomes are divided into photic and aphotic zones. Which of the following determines whether a zone is photic or aphotic?
- a. Distance from land
 - b. Distance from equator
 - c. Water depth
 - d. All of the above
- ____ 5. Terrestrial biomes are classified based on the types of organisms that develop within them. The organisms that make up a biome share the same type of —
- a. biosphere.
 - b. ecosystem.
 - c. pioneer community.
 - d. climax community.
- ____ 6. Permafrost is characteristic of which biome?
- a. Tundra
 - b. Marine
 - c. Desert
 - d. Taiga
- ____ 7. Which terrestrial biome houses the greatest biodiversity?
- a. Taiga
 - b. Temperate forest
 - c. Tropical rain forest
 - d. Grassland
- ____ 8. Small organisms that live in the photic zone of aquatic biomes are —
- a. plankton.
 - b. eubacteria.
 - c. autotrophic.
 - d. heterotrophic.
- ____ 9. A girl notices that her guppies reproduce most when her fish tank water is slightly alkaline. They stop reproducing if the water becomes acidic or if the water becomes too alkaline. This is an example of ____.
- a. secondary succession
 - b. zones of tolerance and intolerance
 - c. communities
 - d. intertidal zones

Ling feeds her guppies one-half teaspoon of fish food every day. The average guppy population in her aquarium over a four-month period is 38 guppies. She increased the food to one teaspoon per day. After a four-month period, the average population is 53 guppies.

- ____ 10. Which of the following statements is supported by these data?
- a. The size of the aquarium was a limiting factor.
 - b. One-half teaspoon of food was a limiting factor.
 - c. As long as Ling keeps adding more food, the guppy population will continue to grow.
 - d. Guppies reproduce rapidly.

- ____ 11. When Ling increased the amount of food, what happened to the carrying capacity of the aquarium?
- It increased.
 - It decreased.
 - It remained the same.
 - It increased and then decreased.
- ____ 12. The stable ecosystem that develops due to succession ____.
- is called a niche
 - is always a forest
 - is called a climax community
 - never changes

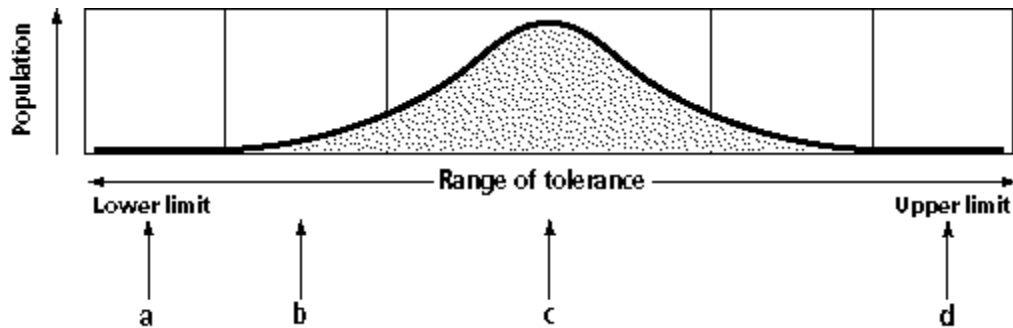


Figure 3-3

- ____ 13. In Figure 3-3, where will you be most likely to find the greatest diversity?
- A
 - B
 - C
 - D
- ____ 14. In Figure 3-3, which section would have a lack of organisms due to an overabundance of resources?
- A
 - B
 - C
 - D
- ____ 15. In Figure 3-3, which section would account for a lower number of organisms near the bottom of a pond due to a short supply of oxygen and sunlight?
- A
 - B
 - C
 - D
- ____ 16. What type of succession is most likely to happen in Figure 3-4?

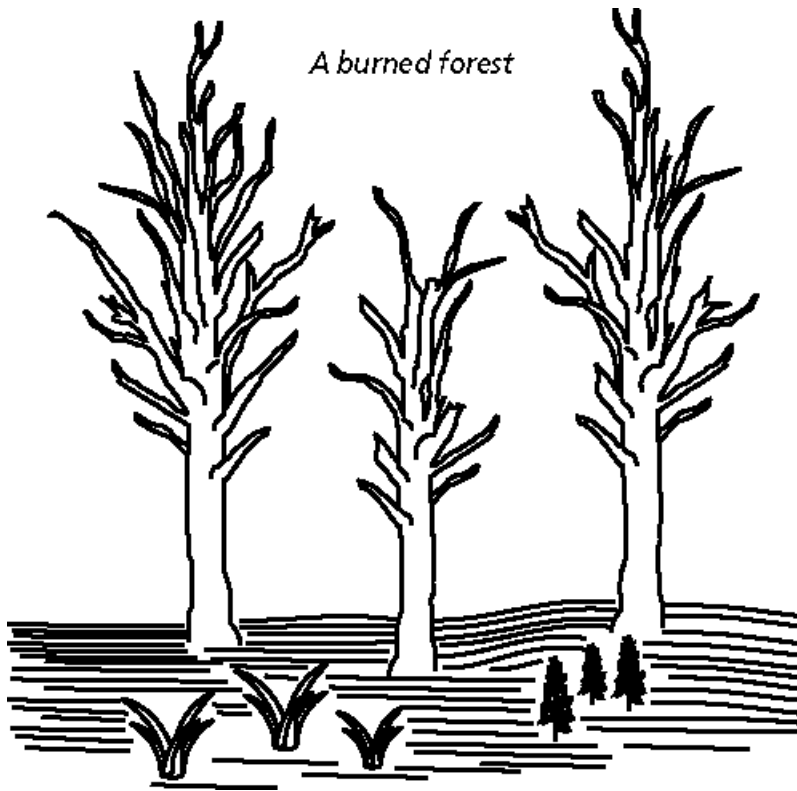


Figure 3-4

- | | |
|--------------|-------------|
| a. primary | c. tertiary |
| b. secondary | d. climax |

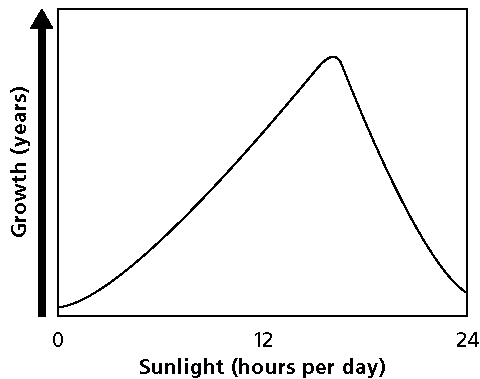


Figure 3-6

- ___ 17. Look at the graph in Figure 3-6. What does this graph tell us about this species of plant?
- | | |
|------------------------------------|------------------------------|
| a. too much sunlight can hurt them | c. heat is damaging to them |
| b. they thrive in a lot of sun | d. they need plenty of water |
- ___ 18. Look at the graph in Figure 3-6. Approximately how many hours of sunlight should these plants receive each day in order to make them grow at their optimum level?
- | | |
|-------|-------|
| a. 4 | c. 16 |
| b. 12 | d. 20 |
- ___ 19. What would be the best time of the year to plant the organism described in Figure 3-6?
- | | |
|-----------|-----------|
| a. winter | c. summer |
|-----------|-----------|

b. spring

d. fall

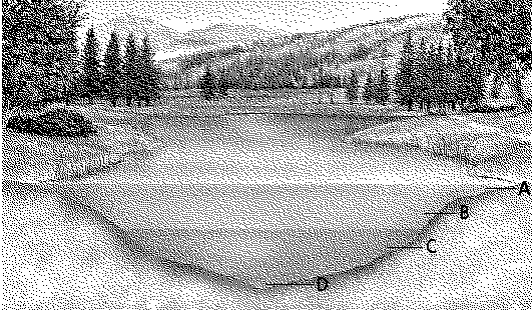


Figure 3-7

- ____ 20. What type of species would be most likely found in the area labeled D in Figure 3-7?
- a. one that requires plenty of oxygen
 - b. plants that require light
 - c. amphibians that need a warm habitat
 - d. decomposers that feed on dead organisms

Modified True/False

Indicate whether the statement is true or false. If false, change the identified word or phrase to make the statement true.

- ____ 21. Herd animals are usually concentrated in the forest biome. _____
- ____ 22. The great northern coniferous forests are part of the tundra biome. _____
- ____ 23. Phytoplankton, which obtain energy by photosynthesis, are usually found concentrated in the photic zone of the ocean. _____
- ____ 24. Optimal factors restrict the numbers of organisms that can exist. _____
- ____ 25. Age, physical condition, and stage in its life cycle may all influence an organism's limits of tolerance. _____
- ____ 26. A large group of ecosystems characterized by the same type of climax community is called a taiga. _____
- ____ 27. The colonization of new sites by communities of organisms is secondary succession. _____
- ____ 28. Conditions that restrict the existence, population size, reproductive success, or distribution of organisms are called ranges of tolerance. _____
- ____ 29. The portion of the shoreline that is affected by high and low tides is the aphotic zone. _____
- ____ 30. The tundra is an arid region characterized by little or no plant life. _____