Bio12-Q1W1-Test

Modified True/False

Indicate whether the statement is true or false.

- 1. The great northern coniferous forests are part of the <u>tundra biome</u>. 2. A pioneer community is usually the stable result of succession. 3. <u>Optimal</u> factors restrict the numbers of organisms that can exist. 4. Age, physical condition, and stage in its life cycle may all influence an organism's limits of tolerance. 5. The portion of the shoreline that is affected by high and low tides is the aphotic zone. **Multiple Choice** Identify the choice that best completes the statement or answers the question. 6. Water is lost to the abiotic parts of the biosphere from the biotic parts by the process of _____. a. precipitation c. transpiration b. photosynthesis d. infiltration 7. Sea stars live in saltwater ecosystems. Some species live in shallow tidal pools, while others live in the deepest parts of the oceans. This is a description of the _____ of sea stars. a. habitat c. niche b. community d. none of these 8. Cougars are predators that often eat weakened or diseased animals. This is a description of the _____ of cougars.
 - a. habitat c. niche
 - b. community d. none of these
 - 9. An ecologist who studies how several species in an area interact among each other and with the abiotic parts of the environment is interested in the biological organization level called a(n) _____.
 - a. organism

c. community

b. population

d. ecosystem



Figure 2-1

10. Referring to Figure 2-1, suppose 10 000 units of energy are available at the level of the grasses. What is the total number of energy units lost by the time energy reaches the coyote?

- a. 90 units
- b. 990 units
- 11. Referring to Figure 2-1, as matter and energy move from grasses to coyotes, the amount of available energy

c. 9900 units

d. 9990 units

- a. increases
- b. decreases
- c. decreases then increases
- d. increases or decreases but population size remains the same
- 12. Referring to Figure 2-1, the coyotes would be considered ___·
 - a. herbivores

- second-order consumers c. d. decomposers
- b. third-order consumers 13. Referring to Figure 2-1, energy flows from ____
- c. mice to cats

d. coyotes to cats

upper mantle

- a. coyotes to grasses
- b. cats to mice
- 14. Where is the biosphere in Figure 2-4?
 - d С

Figure 2-4

- a. core c. b. mantle
 - d. earth's crust
- 15. Identify the abiotic factor labeled in the ecosystem shown in Figure 2-5.



Figure 2-5

- a. mousec. rockb. butterflyd. tree
- 16. In the energy pyramid shown in Figure 2-7, which level has the smallest number of organisms?







17. The organisms growing on the log in Figure 2-8 are ____?



Figure 2-8

a.	producers	с.	carnivores
b.	autotrophs	d.	decomposers

18. The organism shown in Figure 2-12 is involved in which type of symbiosis?



Figure 2-12

- mutualism a.
- b. commensalism

- c. parasitism
- d. predatorism

19. An uncut lawn becomes a meadow and eventually a forest. This process is an example of _____. a. aphotic zones c. estuary

primary succession b.

d. secondary succession





- 20. In Figure 3-3, where will you be most likely to find the greatest diversity?
 - a. A c. b. B d. D
- 21. In Figure 3-3, which section would have a lack of organisms due to an overabundance of resources? a.
 - А В

b.

c. C d. D

С



22. 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
- 23. What would be the best time of the year to plant the organism described in Figure 3-6?
 - winter a.

summer c.

b. spring

- d. fall

Figure 3-7

- You take a sample of species from the area labeled A in Figure 3-7. What would you expect to find? 24.
 - a. almost no life

- c. organisms that need very little oxygen
- b. great species diversity d. one dominant species of fish
- What type of species would be most likely found in the area labeled D in Figure 3-7? 25. 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

Matching

Match each item with the correct statement below.

- a. mutualism
- b. biosphere
- c. ecology
- d. biological community
- decomposer e.
- parasitism f. habitat g.
- h. food web food chain i.
- commensalism j.
- k. scavenger
- heterotroph 1. m. trophic level
- autotroph n.
- 26. relationship between organisms in which both organisms benefit
- 27. network of interconnected food chains
- 28. relationship between organisms in which one organism benefits and the other is neither harmed nor benefited
- 29. feeds on dead organisms
- 30. step in the passage of energy and matter through an ecosystem