Chapter 3: Communities and Biomes

1. Based on the data in the graph, what is the typical temperature range for March?

- a. between -29º C and -19º C
- b. between 10º C and 24º C
- c. between -18º C and -4º C
- d. between 4º C and 16º C

2. Which marine biome is characterized by deep water depths that never receive sunlight?

- a. a bog
- b. an estuary
- c. an aphotic zone
- d. a lake

3. Which of these biomes would you expect to find a coyote living in?

- a. desert
- b. tropical rain forest
- c. taiga
- d. tundra

4. Based on the data in the graph, at what time of day is the dissolved oxygen level in the ocean greater than the dissolved oxygen level in a tide pool?
5. Which of these is a characteristic of a grasslands biome?
   - a. It has a short plant-growing season.
   - b. There are vast land areas with bare ground and no plants.
   - c. It contains an underground mat called sod.
   - d. Warm weather allows for year-round plant growing conditions.

6. Based on the data in the graph, about how much annual precipitation does a taiga usually receive?
   - a. no more than 50 cm
   - b. no less than 300 cm
   - c. about 250-400 cm
7. An undersea volcano in the Hawaiian Islands chain erupts, forming a new island in the Pacific Ocean. Over the course of time, which of these would most likely be the first species to survive on the new island?
   a. birds  
   b. grasses  
   c. lichens  
   d. mammals

8. What does the red line on the graph represent?
   a. a climax community  
   b. primary succession  
   c. a limiting factor  
   d. secondary succession

9. Soil chemistry is one example of _________.
   a. a limiting factor  
   b. primary succession  
   c. a climax community  
   d. tolerance

10. Which of these statements is true?
    a. The soils in tundras usually have a large humus content.  
    b. Tropical rain forests are communities that occur in climates that have a defined dry season with rainfall totals less than 50 cm of rain per year.  
    c. Deciduous forests are populated with broad-leaved hardwood trees that lose their foliage every year.
d. Grasslands are identified by their permanently frozen ground called permafrost.

11. Which of these statements is NOT true?

a. Secondary succession happens in areas where organisms had previously lived.
b. The process of succession resulting in a climax community always happens within one year.
c. Primary succession happens when communities of organisms populate otherwise barren land.
d. Ecological change does not always equate with destruction.

12. An organism with the ability to withstand changes to biotic and abiotic environmental factors is said to have __________.

a. tolerance
b. a pioneer community
c. limiting factors
d. secondary succession

13. This graph shows annual precipitation versus temperatures for various biomes. Based on the data in the graph, which biome has annual precipitation between 275-325 cm?

a. temperate rain forest
b. tundra
c. savanna
d. desert

14. The portion of the shoreline that lies between the low tide line and the high tide line is called
15. Which of these is a characteristic of a tropical rain forest?

- a. short, mild summers
- b. populated with squirrels, bears, and deer
- c. relatively few trees per hectare
- d. location close to the Equator