

## MULTIPLE CHOICE

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

\_\_\_\_\_ 1. What is the term for a feature that allows an organism to survive better in its environment?  
a. variation  
b. adaptation  
c. homologous structure  
d. vestigial structure

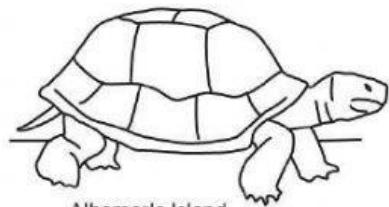
\_\_\_\_\_ 2. All the individuals of a species that live in a particular area are called a  
a. variation.  
b. fossil.  
c. population.  
d. group.

\_\_\_\_\_ 3. The remnant of an organ that had a function in an early ancestor is known as a(n)  
a. vestigial structure.  
b. analogous structure.  
c. homologous structure.  
d. fossil structure.

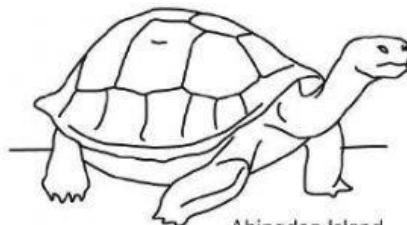
\_\_\_\_\_ 4. What observations did Charles Darwin make about finches in the Galápagos Islands?  
a. The same species of finches lived on all the islands.  
b. Different species of finches lived on different islands.  
c. Various species of finches lived on just one of the islands.  
d. Identical species of finches lived in South America.

\_\_\_\_\_ 5. Which scientist developed a classification system for organisms?  
a. Carolus Linnaeus  
b. Charles Darwin  
c. Jean-Baptiste Lamarck  
d. Georges L.L. de Buffon

\_\_\_\_\_ 6. The tortoise from Abingdon Island, shown in Figure 10.1, would likely be better adapted than the Albemarle Island tortoise to which of the following environments?



Albemarle Island



Abingdon Island

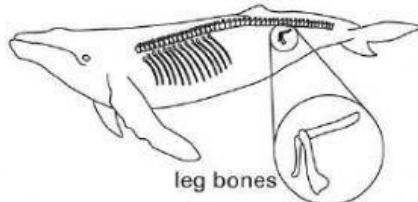
**FIG. 10.1**

- a. areas with short plants and mosses
- b. areas with no plants and sand dunes
- c. areas with lots of taller plants
- d. areas with only tall trees

\_\_\_\_\_ 7. Which theory states that floods and earthquakes have occurred often in Earth's history?

- a. uniformitarianism
- b. natural selection
- c. catastrophism
- d. artificial selection

\_\_\_\_\_ 8. The hind leg bones shown in the whale in Figure 10.2 are examples of



**FIG. 10.2**

- a. homologous structures.
- b. analogous structures.
- c. fossil structures.
- d. vestigial structures.

\_\_\_\_\_ 9. Charles Darwin found fossils that looked like ancient versions of living species. From this evidence Darwin suggested that Earth was

- a. much more than 6000 years old.
- b. less than 6000 years old.
- c. only 6000 years old.
- d. about 1000 years old.

\_\_\_\_\_ 10. What is the process in which humans breed organisms for certain traits?

- a. natural selection
- b. inheritance of acquired characteristics
- c. artificial selection
- d. descent without modification

\_\_\_\_\_ 11. Individuals that are well adapted to their environment will survive and produce

- fewer mutations.
- more offspring.
- stronger genes.
- better traits.

\_\_\_\_\_ 12. Natural selection results in change over time by acting on traits that are

- heritable.
- new.
- mutated.
- better.

\_\_\_\_\_ 13. What is the study of the distribution of organisms around the world?

- paleontology
- geography
- geology
- biogeography

\_\_\_\_\_ 14. Fossil evidence shows that structures considered vestigial in living organisms

- are not found in ancient organisms.
- have always been vestigial.
- were useful to their ancestors.
- do not fill gaps in the fossil record

\_\_\_\_\_ 15. Which theory ties the fields of biology and geology together?

- evolution
- uniformitarianism
- catastrophism
- gradualism