Ecology Practice Questions

True False…

1. Freshwater habitats are independent of terrestrial habitats.  **False**
2. An ecosystem consists of biotic and abiotic factors.  **True**
3. Clearing a forest would reduce the amount of energy available to the consumers.  **True**
4. While an understanding of the interactions between organisms and their environment was very important to early hunter and gatherer humans, it is even more important today because humans are having significant effects on the environment.  **True**
5. Cutting down trees in a forest alters the habitat of the organisms living in the forest.  **True**
6. An organism’s niche includes its habitat.  **True**

Multiple choice…

A ‘habitat’ is:
A. A place to buy furniture and furnishings  
B. The same as an ecosystem  
C. **A particular area inhabited by plants and animals**  
D. The number of different organisms living in a specific area

How an organism is suited to live in a particular place is called:
A. Competition  
B. **Adaptation**  
C. Addition  
D. Participation

‘Biodiversity’ is described as:
A. **The range of different species in an environment**  
B. The seasonal and daily changes in an environment  
C. The way species differ from one another  
D. The influence of physical factors on an environment

Which of these is a correct food chain?
A. Fish< fries< ketchup  
B. Man <cow <grass  
C. **Cow >slaughterhouse >supermarket**  
D. Cow <Milk< Man

The arrows in a food chain show:
A. Who eats who  
B. The route of food to the shops  
C. **The movement of energy between organisms**  
D. Heat energy being lost

All the energy in a food chain originates from:
A. A plant  
B. Farmers  
C. **The Sun**  
D. An electric outlet

Rabbits are important grazers, maintaining some important grassland habitats. If another catastrophe were to reduce rabbit populations what would happen?
A. Important grassland butterflies would be lost  
B. **There would be more grass for the surviving rabbits**  
C. The grassland would be invaded by trees and shrubs  
D. All of the above
A food web:
A. Is made by a food spider
B. Shows how feeding relationships are interlinked
C. Shows the number of organisms in a habitat
D. Only shows important animals

Which of these are not competed for by plants?
A. Light
B. Minerals
C. Warmth
D. Water

Many pesticides are stored in an animal’s body fat.
If a pesticide got into a lake, which organism would have the highest level?
A. Eagle
B. Fish
C. Microscopic animals
D. Microscopic plants

The biggest impacts are made on the environment by:
A. The migration of organisms
B. Predation
C. Human interference
D. Competition

Which of the following would represent an ecosystem?
A. A lake
B. A fish tank
C. A prairie
D. all of these.

All the nonliving parts of an ecosystem are referred to as:
A. the community
B. biotic factors
C. abiotic factors
D. biomes

Which of the following would be a biotic factor in an ecosystem?
A. bacteria
B. soil
C. temperature
D. rainfall

The types and numbers of species in a given area is most greatly determined by the area's:
A. biotic factors
B. precipitation
C. climate
D. biodiversity

Abiotic factors affect an ecosystem and include all of these except the
A. quantity and quality of water
B. nitrogen-fixing bacteria
C. amount of light available
D. quantity of minerals

The most important single factor affecting the biosphere is
A. solar radiation
b. precipitation  
c. the biotic community  
d. wind  

Collectively, physical factors such as light, temperature, and moisture that affect an organism's life and survival are called the  
a. biotic environment  
b. ecosystem  
c. abiotic environment  
d. niche  

The rate of photosynthesis carried on by plants living in a body of water depends upon the  
a. oxygen content of the water  
b. amount of light that penetrates the water  
c. nitrogen content of the water  
d. elevation of the body of water  

Which of the following would not be included in a description of an organism's niche?  
a. its trophic level  
b. its color  
c. the humidity it prefers  
d. when it reproduces  

Ecology is the study of the interaction of living organisms  
a. with each other and their habitat.  
b. and their communities.  
c. with each other and their physical environment.  
d. and the food they eat.  

Ecological models are useful for  
a. making predictions about future ecological changes.  
b. testing predictions about future ecological changes.  
c. evaluating proposed solutions to environmental problems.  
d. All of the above  

The physical location of an ecosystem in which a given species lives is called a  
a. habitat.  
c. niche.  
b. tropical level.  
d. biotic zone.  

Which of the following are adaptations for avoiding unfavorable conditions?  
a. migration  
b. dormancy  
c. body temperature regulation  
d. all of the above  

Which of the following would not be included in a description of an organism’s niche?  
a. its trophic level  
b. the humidity and temperature it prefers  
c. when it reproduces  
d. its number of chromosomes