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**Marks** 13.00/14.00

**Grade** 27.86 out of 30.00 (92.86%)

### Question 1

Correct

Mark 1.00 out of 1.00

Which scientific concept did Charles Darwin and Alfred Wallace independently discover?

Select one:

- ☐ a. Mutation
- ☒ b. Natural selection ✓
- ☐ c. Overbreeding
- ☐ d. Sexual reproduction

### Question 2

Correct

Mark 1.00 out of 1.00

Which of the following situations will lead to natural selection?

Select one:

- ☐ a. The seeds of two plants land near each other and one grows larger than the other.
- ☐ b. Two types of fish eat the same kind of food, and one is better able to gather food than the other.
- ☐ c. Male lions compete for the right to mate with females, with only one possible winner.
- ☒ d. all of the above ✓

### Question 3

Correct

Mark 1.00 out of 1.00

What is the difference between micro- and macroevolution?

Select one:

- ☐ a. Microevolution describes the evolution of small organisms, such as insects, while macroevolution describes the evolution of large organisms, like people and elephants.
- ☐ b. Microevolution describes the evolution of microscopic entities, such as molecules and proteins, while macroevolution describes the evolution of whole organisms.
- ☒ c. Microevolution describes the evolution of populations, while macroevolution describes the emergence of new species over long periods of time. ✓
- ☐ d. Microevolution describes the evolution of organisms over their lifetimes, while macroevolution describes the evolution of organisms over multiple generations.

**Question 4**

Correct

Mark 1.00 out of 1.00

Galápagos medium ground finches are found on Santa Cruz and San Cristóbal islands, which are separated by about 100 km of ocean. Occasionally, individuals from either island fly to the other island to stay. This can alter the allele frequencies of the population through which of the following mechanisms?

Select one:

- ☐ a. natural selection
- ☐ b. genetic drift
- ☒ c. gene flow ✓
- ☐ d. mutation

**Question 5**

Correct

Mark 1.00 out of 1.00

In which of the following pairs do both evolutionary processes introduce new genetic variation into a population?

Select one:

- ☐ a. natural selection and genetic drift
- ☒ b. mutation and gene flow ✓
- ☐ c. natural selection and gene flow
- ☐ d. gene flow and genetic drift

**Question 6**

Correct

Mark 1.00 out of 1.00

Which situation would most likely lead to allopatric speciation?

Select one:

- ☒ a. A flood causes the formation of a new lake. ✓
- ☐ b. A storm causes several large trees to fall down.
- ☐ c. A mutation causes a new trait to develop.
- ☐ d. An injury causes an organism to seek out a new food source.

**Question 7**

Incorrect

Mark 0.00 out of 1.00

The word “theory” in theory of evolution is best replaced by \_\_\_\_\_.

Select one:

- ☐ a. fact
- ☒ b. hypothesis ✖
- ☐ c. idea
- ☐ d. alternate explanation

**Question 8**

Correct

Mark 1.00 out of 1.00

The number of currently described species on the planet is about \_\_\_\_\_.

Select one:

- ☐ a. 17,000
- ☐ b. 150,000
- ☒ c. 1.5 million ✔
- ☐ d. 10 million

**Question 9**

Correct

Mark 1.00 out of 1.00

A secondary plant compound might be used for which of the following?

Select one:

- ☐ a. a new crop variety
- ☒ b. a new drug ✔
- ☐ c. a soil nutrient
- ☐ d. a crop pest

**Question 10**

Correct

Mark 1.00 out of 1.00

Pollination is an example of \_\_\_\_\_.

Select one:

- ☐ a. a possible source of new drugs
- ☐ b. chemical diversity
- ☒ c. an ecosystem service ✔
- ☐ d. crop pest control

**Question 11**

Correct

Mark 1.00 out of 1.00

Converting a prairie to a farm field is an example of \_\_\_\_\_.

Select one:

- ☐ a. overharvesting
- ☒ b. habitat loss ✓
- ☐ c. exotic species
- ☐ d. climate change

**Question 12**

Correct

Mark 1.00 out of 1.00

Which two extinction risks may be a direct result of the pet trade?

Select one:

- ☐ a. climate change and exotic species introduction
- ☐ b. habitat loss and overharvesting
- ☒ c. overharvesting and exotic species introduction ✓
- ☐ d. habitat loss and climate change

**Question 13**

Correct

Mark 1.00 out of 1.00

What kind of ecosystem are exotic species especially threatening to?

Select one:

- ☐ a. deserts
- ☐ b. marine ecosystems
- ☒ c. islands ✓
- ☐ d. tropical forests

**Question 14**

Correct

Mark 1.00 out of 1.00

Certain species of parrot cannot be brought to the United States to be sold as pets. What is the name of the legislation that makes this illegal?

Select one:

- ☐ a. Red List
- ☐ b. Migratory Bird Act
- ☒ c. CITES ✓
- ☐ d. Endangered Species Act (ESA)

