Test- Evolution

Biology

**Part I- Darwin and the Theory of Evolution**

1. Which of the following people is considered to be the “Father of Evolution”?
2. Which of the following is NOT considered part of the Theory of Evolution?
3. What is meant by the term “natural selection”?
4. Evolution can be found in which of the following?
5. Two organisms are considered to be in the same species if
6. Which of the following is an example of evolution?
   * 1. Which of the following may provide evidence for evolution?
7. The structure of a bird’s arm and the structure of a butterfly’s wing are similar and considered to be
8. The structure of a human’s arm and a bat’s wing are considered to be
9. Fossils found deeper in a geologic layer are considered to be \_\_\_\_\_\_\_\_\_\_ than fossils found in the top part of that geologic layer.
10. Biological fitness is the ability of the individual to
11. According to Darwin’s theory of natural selection, certain individuals will leave more offspring than do others. This survival is due to the
12. A gene pool is
13. Beatle populations changing from bright colored to mostly dark-colored is an example of
14. Which of the following is an example of speciation?

1. An adaptation is
2. The separation of a population by barriers (such as rivers or mountains) such that the population does not reproduce, is called
3. An analysis of derived characters (for example- traits) is used to generate a
4. What does a cladistic analysis show about organisms?

20 Which of the following is NOT a part of a Cladistic system of classification?

21 Which of the following statements is NOT consistent with the modern scientific theory of evolution?

**For questions 24 - 25, consider the following:**

Organism A: TACGGGAGGA

Organism B: TACGGGAGGG

Organism C: CAGGGGGGGG

1. Which organisms are the most closely related?
2. Which form of evidence of evolution does this represent?

**Questions 26-31: Examine the phylogenetic tree and the graph, and use the passage below.**

There are three finches that have been moved into one common environment. The environment is predominantly a “ground” habitat, and there are no trees to be seen. Only a few cactus plants exist in this climate. The three finches that were placed into this environment were the woodpecker finch, the medium ground finch, and the small cactus finch.

1. Based on the graph below, which finch is finch #1?

25 Based on the graph below, which finch is finch #2?

1. Based on the graph below, which finch is finch #3?
2. Based on the graph below, which finch is being selected for?
3. Based on the graph below, which finch is the least fit?
4. Which of the following is the best hypothesis to explain the division between cactus eating finches and seed eating finches?