

**ANTH A105/A303 QUIZ # 5 Fall 2003 CIRCLE THE LETTER OF THE ONE BEST ANSWER:**

1. He was Darwin's "Bulldog", who defended his ideas against those who opposed evolution  
Lamarck Malthus Spencer Huxley Wallace Lyell Mendel
2. Charles Darwin knew his own theory was incomplete because it lacked explanations both of how inheritance was not blending, and of why:  
A. Humans have no tails. B. variation did not disappear. C. all mammals have nipples.  
D. human anatomy was similar to that of apes. E. evolution was slow and gradual.
3. Darwin's theory of evolution included all these ideas except one; circle that one:  
Inheritance of acquired characteristics Natural selection  
Descent from a common ancestor Adaptation of a species to environmental change  
Variation among members of a species Differential reproduction
4. Which is true of Gregor Mendel?  
A. He discovered a theory of evolution identical to Darwin's at the same as Darwin  
B. He wrote a book on geology that Darwin read on his voyage  
C. He wrote "ON Population", a popular book about over-reproduction and a struggle for survival  
D. discovered that each of the traits he studied in peas had two factors of inheritance: one from each parent  
E. proved that the concept of inheritance as irreversible blending was true
5. The gene for shortness (dwarf) in peas is a recessive (or weak factor) to the gene for normal height (tall). When Mendel crossed pure-bred tall pea plants with short ones, the hybrids were:  
A. all tall  
B. all short  
C. in the ratio of 3 tall to 1 short  
D. two-thirds tall, one third short  
E. All medium
6. The fact that any attempt to crossbreed donkeys and horses results only in a sterile animal (called a mule) is proof that (in regard to these two animals):  
A. Mendel was wrong about genetics. B. Darwin was wrong about evolution.  
C. Linnaeus was wrong about classification. D. they belong to the same species.  
E. they belong to two different species. F. mules are their common ancestors.
7. Which is FALSE about Darwin?  
A. His trip on the Beagle went all around South America  
B. He published "On the Origin of Species" in 1859  
C. He was a lousy student and earned a degree in divinity, not in biology  
D. As a boy he was an avid collector of plants and animals, a hunter, and a naturalist  
E. He formulated his theory of evolution at sea, finishing "Origin" during his trip on the Beagle
8. Darwin said that the mechanism that caused evolutionary change over time was Natural Selection; which of these is NOT part of the process of natural selection?  
A. Individuals of a species show variation in physical characteristics  
B. More individuals are born than can live and reproduce generation after generation  
C. In any environment, individuals with certain physical characteristics have an advantage over those without them, and thus are more likely to survive the struggle for survival, and reproduce  
D. Offspring tend to resemble their parents  
E. Every single individual of a species must change in its lifetime in order for there to be any evolutionary change at all.
9. Two point mini-essay: Look at question # 8 above; apply the four correct ideas to the evolution by natural selection of the long neck of giraffes.

Print your first name \_\_\_\_\_ Last Name \_\_\_\_\_

BONUS Q: Lamarck said that every fossil species was an ancestor of a different modern species; what did Darwin say about the relationship between fossils and living species?