Evolution Exam 2017

Be able to discuss types of evidence for evolution

* Fossils
* DNA
* Transitional Species
* Embryology
* Protein similarities
* Biogeography
* Vestigial structures
* Homologous structures

Be able to discuss Darwin vs Lamarck (Natural selection vs Acquired Characteristics)

How did Darwin come up with his theory? Where did he go? What did he see? What was his theory?

How did Darwin’s Finches get to the Galapagos islands? Why did they look different from island to island?

What did Darwin write? What did it say?

Relate mutations to evolution (are they good or bad?) Do these become adaptations? Explain.

What would happen if the resources in an ecosystem become scarce?

Compare Homologous structures to Analogous structures.

Compare Divergent evolution to Convergent evolution.

What is a Vestigial Structure? Examples?

Coevolution vs

Artificial Selection vs. Natural Selection

How do you calculate genotype and phenotype frequency?

Explain p + q = 1

What are the stipulations for the Hardy Weinberg genetic equilibrium? What does it mean for a population to be in Hardy Weinberg genetic equilibrium?

What is the difference between gene flow and genetic drift?

Compare/Contrast the bottleneck effect to the founder effect?

What is sexual selection?

Explain how bell curves are related to populations.

Compare/Contrast Stabilizing, directional and disruptive selection.

Explain the process of geographic and reproductive isolation (including pre and post zygotic isolation)

Compare gradualism to punctuated equilibrium.

Biological Species Concept vs Morphological species company

Discuss how a pesticide could stop working in a farmer’s field. (include information about evolution)