[Name of the Writer]

[Name of Instructor]

[Subject]

[Date]

**Response 1**

This student has discussed that there are chances distinct species produce fertile offspring but mostly different species result in the production of infertile offspring. Moreover, this student discusses paleospecies and argues that if we have fossil remain of wolf and dog, and if there is a fossil dog that resembles the wolf, its physical structure will lead us to identify both wolf and dog as the same species. But if the fossil dog is a tiny kind of dog, it may be categorized into two different species because the physical structure of the dog will be observed a lot different than wolves. Furthermore, this student has discussed that there are different species that have a common ancestor and are closely related. Their genetic codes resemble a lot, and this resemblance can often lead to the production of fertile offspring — for instance, species of wolf and dog.

**Response 2**

This student has argued that dog and wolves resemble a lot and they have very fewer variations. This individual discussed that a dog can interbreed in its species and produce fertile offspring, but it is unable to produce fertile offspring if it crossbreeds with the wolf. It is because the lineage the two of these species may lead to the genetic variations. He further discussed paleospecies that some species like wolf and dog might have similar fossil evidence because of their similarities. He also addressed that concept of biological species cannot be tested in fossil species, for that it is required to bring up levels of variations that are present in species that are living at the moment. Moreover, this student has also discussed that the reason why different organisms share a similarity in genetic material is that they were the one specie in the past, but the evolutionary process brought changes in them. That is why some species show resemblance in physical as well as internal structure.