**Background Information**

Listed below are the details outlining a crime scene that occurred over a period of time. You are to investigate and evaluate the crime and be prepared to present your information in a court in the form of a written document. You will have to use entomology, odontology, anthropology, pathology, and microbiology techniques to complete your investigation.

Carl and Joseph were in the woods of Georgia in early fall. They had set up a camp because they were both deer hunters. In the fall of years when the weather is cooler, deer are very prevalent. On this cool November morning, the men were walking through the woods in their quest for deer. On the second day of being in the woods, walking through what was really thick brush and uneven terrain, one of the men slipped and fell into what appeared to be a covering of a hole in the ground. As he began to try and pull himself out, he saw several skulls and bones lying around. He immediately screamed for his friend, who assisted him in getting out of the hole. Together, they looked in and saw skeletons and what appeared to be a decomposing body.

The two men called the local police. The police arrived, secured the area, and called for the forensic team to come and investigate. You are the forensic person that has been asked to identify the 5 skeletons in the grave and the body that was only partially decomposed.

Address the following:

Why will this particular case require the use of forensic biology? Explain in detail.

When you arrive on the scene, what is your first course of action? Describe your process, and be specific.

How will you avoid contamination at this stage of the investigation? Explain.

How will you control the other first responders or law enforcement officers? What challenges do they pose to a forensic investigator? Explain.

What will you do to identify the remains at this crime scene? Explain.

What is the documentation process for collecting and preserving this type of evidence? Explain.

How will you transport your evidence to the lab safely? Explain.

Once you arrive back at the lab, what significant risks of contamination exist? Explain.

How will you avoid this contamination? Explain.

What is the process for DNA analysis on the decomposing body?

What specific tests will you use? Explain.

How will serology play a role in the selected testing processes? Explain.

Using this decomposing body as an example, what is the process that you will follow to properly conduct this DNA test?

What challenges or barriers exist when you begin to interpret the results of your DNA test? Explain in detail.

How large of a role will facial reconstruction play in this investigation? Explain.

Next, provide 2 scenarios of court case outcomes regarding this investigation.

One scenario must result in the successful identification and conviction of the perpetrator. You will need to fill in the blanks with regard to physical evidence and other necessary details.

The other scenario must result in a wrongful conviction. You will need to identify the elements that lead to this wrongful conviction.

Be sure to reference all sources using APA style.