

Format: 15 multiple choice questions and 6 open ended questions

Concepts to Review:

- Introduction to Forensic Science
 - Be able to describe the purpose of *forensic science*.
 - Be able to describe the purpose of a forensic scientist's *laboratory notebook*.
 - Understand the difference between an *observation* and an *inference*.
 - Understand the difference between *direct evidence* and *circumstantial evidence*, and be able to give examples and recognize examples of each of these types of evidence.
 - Be able to explain the role of *physical evidence* in forensic science.
 - Be able to explain how *trace evidence* is different from other types of physical evidence.
 - Understand the difference between a *primary crime scene* and a *secondary crime scene*.
 - Understand the difference between a *suspect* and an *accomplice*.
 - Be able to explain why *deductive reasoning* is useful in criminal investigations.
 - Be able to explain how an *alibi* is useful when using deductive reasoning.
 - Be able to describe some of the *limitations* of forensic science.

- Fingerprint Analysis
 - Understand what a *fingerprint* is and how it is formed.
 - Know and be able to use the terms *dactyloscopy* and *dactylogram*.
 - Be able to give examples of how fingerprints are used in law enforcement and identification.
 - Be able to differentiate between the *ridges* and *valleys* of a fingerprint.
 - Be able to recognize the difference between an *arch*, a *loop*, and a *whorl*.
 - Be able to explain the role of *minutiae* in fingerprint analysis.
 - Be able to identify some examples of minutiae in a fingerprint sample.
 - Be able to explain what a *latent print* is and to describe how *black powder*, *fluorescent powder*, and *superglue fuming* are used to collect latent prints.
 - Be able to describe *AFIS* and explain how it is used by forensic scientists.
 - Be able to describe some of the *limitations* of fingerprint analysis.

- Lab Skills
 - Be able to use *deductive reasoning* when trying to investigate a crime.
 - Be able to create a *dactylogram* given dactylography ink.
 - Be able to lift a latent print if given black or fluorescent powder, a feather or brush, and clear tape.

Resources:

You may use your laboratory notebook during the exam, but you may NOT consult any other notes or handouts (your regular class notebook and anything that was not added to your laboratory notebook during our lab work is NOT ALLOWED).

NOTE: You may be given supplies from one of the labs and be asked to demonstrate that you can carry out one of the laboratory procedures we learned in this unit.