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University Examinations 2023/2024

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN BIOTECHNOLOGY

SHD 3451: FORENSIC GENETICS AND ITS APPLICATIONS

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Outline the duties of first officer on the scene of crime (4 marks)
- b) Describe should be included in the crime scene sketches (6 marks)
- c) Explain how you could protect yourself from potentially infectious materials at crime scene (6 marks)
- d) Outline the different types of exams that a threatening letter and its envelope that supposedly contains anthrax or some other contagion could be subjected to (6 marks)
- e) Illustrate the different types of immediate cause of death (3 marks)
- f) Briefly describe different types of polymorphism (5 marks)

QUESTION TWO: (20 MARKS)

Discuss important aspects other than science that could affect how you analyse forensic evidence

QUESTION THREE: (20 MARKS)

Describe how a forensic biologist could use short tandem repeats (STRs) in the analysis of crime

QUESTION FOUR: (20 MARKS)

Describe how you could come to conclusion that mechanical trauma was the cause of death to a crime victim