



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2019/2020

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF SECURITY
MANAGEMENT AND POLICING STUDIES

CITY CAMPUS

KPS 814: ADVANCED FORENSIC SCIENCE AND CRIMINAL INVESTIGATION

DATE: Monday, 25th November 2019

TIME: 5.30p.m-8.30p.m

INSTRUCTIONS: Answer any FOUR questions. Each question is total 15 marks

1. Forensic scientists find themselves with the task of examining questioned documents in order to provide evidence that will lead to conviction or exoneration of a suspect. Giving relevant examples of questioned documents, discuss the physical and chemical analysis methods used during examination of questioned documents. (15marks)
2. As a forensic scientist attached to the Directorate of Criminal Investigation(DCI) Kenya, you arrive at a crime scene of a suspected homicide and find blood stains scattered all over the place. You are required to carry out a bloodstain analysis to reconstruct the events that led to homicide.
 - (a) describe ten valuable pieces of information that you are likely to document by analysing the pattern of bloodstains you observe. (10marks)
 - (b) Collecting blood samples for laboratory analysis will provide additional information that can strengthen the case. what are some of the questions that serologists are likely to ask to support the case? (5marks)
3. As a lead forensic expert involved in investigating a murder case, discuss seven(7) categories of evidence you would analyze in order to ensure the murderers are brought to book. Provide a relevant example for each category. (15 marks)
4. Forensic psychiatry is an important element of crime scene investigation and analysis of evidence in a court room. Giving relevant examples, discuss:

- (a) Behavioural disorders that a accused person may have that contribute to commission of crime or confession (5 marks)
 - (b) Ten special problems faced by forensic psychiatrists in their line of duty (5marks)
 - (c) The main values that guide ethical practice of forensic psychiatrists (5marks)
5. Obtaining evidence to support a criminal case in a rigorous process that requires careful planning and execution. Discuss this statement in relation to:
- (a) Analysis of bias to minimize human error and ensure admissibility of evidence.(5marks)
 - (b) Steps to be taken during handling of the evidence to ensure the case stands trail in a court of law. (5 marks)
6. Giving relevant examples:
- (a) discuss when a forensic scientist is required to conduct a dental identification(10marks)
 - (b) describe the stages of regressive changes in the teeth for use in age estimation in adult individuals as used in forensic science. (5marks)