

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

FOURTH YEAR EXAMINATION FOR THE DEGREE
OF BACHELOR OF ARTS IN CRIMINOLOGY AND
SECURITY STUDIES

CRSS 413: PHYSICAL SECURITY

STREAM: B.A. CRSS

TIME: 2 HRS

DAY: FRIDAY [11.30 A.M-1.30 P.M]

DATE: 30/01/2026

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

Instructions: Answer all questions in **SECTION A** and any **TWO** in **SECTION B**

SECTION A (30 MARKS)

QUESTION ONE

- (a) You are the Security Manager at a large public university in Kenya with 30,000 students across 3 campuses. Following a recent incident where unauthorized persons accessed student hostels, management has tasked you with upgrading the access control system.
- (i) Compare THREE different access control technologies suitable for this university environment. For each technology, provide a detailed discussion **(6 Marks)**
 - (ii) Recommend which access control technology you would select and justify your choice with at least THREE reasons **(4 marks)**
- (b) Following the lessons learned from the 2013 Westgate Mall attack and the 2019 DusitD2 complex attack, Kenya has significantly improved its emergency response capabilities.
- (i) Explain the Incident Command System applied and identify FOUR key improvements in emergency response demonstrated during the DusitD2 attack compared to Westgate **(6 marks)**
 - (ii) You are developing an emergency evacuation plan for a shopping mall in Kisumu with 80 retail stores. Outline FOUR essential components that must be included in this evacuation plan, explaining why each is critical **(4 marks)**
- (c) Discuss circumstances under which use of force by security personnel is justified and how organizations should ensure ethical conduct, while using force **(10 Marks)**

SECTION B (40 MARKS)

QUESTION TWO

- (a) You have been hired as a security consultant to conduct a comprehensive perimeter security assessment for a pharmaceutical manufacturing plant in Athi River. The 15-acre facility stores high-value medicines and raw materials worth Ksh 500 million. The area has experienced multiple break-ins at nearby facilities, and there are concerns about organized theft rings. Design a comprehensive perimeter security solution that includes:

- (i) Appropriate fencing system with justification **(3 marks)**
 - (ii) Lighting design with illumination standards **(3 marks)**
 - (iii) Detection systems and technology integration **(2 marks)**
 - (iv) Estimated budget breakdown for implementation **(2 marks)**
- (b) The same pharmaceutical plant operates 24/7 with three shifts. Management is concerned about security guard fatigue and performance quality, especially during night shifts.
- (i) Analyze the challenges of 12-hour shifts versus 8-hour shifts **(7 marks)**
 - (ii) Recommend an optimal shift management strategy for this facility, including specific measures to manage fatigue and maintain alertness. **(3 marks)**

QUESTION THREE

- (a) You are investigating a suspected internal theft case at a warehouse in Nairobi's Industrial Area. Over the past 3 months, inventory discrepancies totaling Ksh 2.5 million have been identified. CCTV footage shows a night shift supervisor, John Kamau, removing boxes from the warehouse on multiple occasions.
- (i) Outline the investigation process you would follow from initial suspicion to case resolution, identifying at least SIX key steps **(6 marks)**
 - (ii) Explain how you would ensure proper chain of custody for the CCTV evidence to make it admissible in Kenyan courts **(4 marks)**
- (b) You need to interview John Kamau, the suspected supervisor. He has not yet been informed that he is under investigation.
- (i) Compare the PEACE interview model with the Reid interrogation technique, highlighting key differences and which approach would be more appropriate for this situation in the Kenyan legal context **(6 marks)**
 - (ii) Identify FOUR specific preparations you must make before conducting this interview, considering both investigative effectiveness and Kenyan legal requirements (Employment Act and Constitution) **(4 marks)**

QUESTION FOUR

- (a) A large corporate client in Nairobi has approached your security consulting firm to develop a comprehensive Security Master Plan for their 20-acre corporate campus with 8 buildings, 1,200 employees, and a data center.

- (i) Describe the consulting process framework you would follow, identifying the FOUR main phases from engagement to project completion **(4 marks)**
- (ii) Explain the risk assessment methodology you would use to identify security priorities, showing how you would calculate and prioritize risks. Include a practical example using the Risk Formula **(6 marks)**
- (b) Discuss how an organization can balance employee privacy rights with legitimate security investigation needs under Kenya's Data Protection Act? **(10 Marks)**

QUESTION FIVE

- (a) Examine why the Kenyan security industry experience high turnover rates and what strategies organizations can implement to improve retention **(10 Marks)**
- (b) Elaborate on how AI-enhanced surveillance systems benefit Kenyan organizations while addressing ethical concerns **(10 Marks)**