

LAIKIPIA



UNIVERSITY

# UNIVERSITY EXAMINATIONS

2<sup>ND</sup> SEMESTER 2023/2024 ACADEMIC YEAR

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

**CRSS 424: SCIENCE, TECHNOLOGY AND CRIME**

***STREAM: BA***

***TIME: 2 HRS***

***DAY: WEDNESDAY [11.30-1.30 P.M]***

***DATE: 17/04/2024***

**THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES**

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

**QUESTION ONE (30 MARKS)**

- a) Define the following terms **(8 Marks)**
- i) Information Security -
  - ii) Spoofing
  - iii) Cyber power
  - iv) Firewall
- b) A copyright is an intellectual property right granted by a government that gives the owner exclusive rights to use, with some limited exceptions, original expressive work. Describe three ways digital age has impacted the enforcement and protection of copyright **(6 Marks)**
- c) Describe the concept of "digital money laundering" and provide any two examples of how it occurs **(6 Marks)**
- d) Enterprise Information Security Architecture (EISA) is the process of instituting a complete information security solution to the architecture of an enterprise, ensuring the security of business information at every point in the architecture. Explain three aspects of Enterprise Information Security Architecture (EISA). **(6 Marks)**
- e) Describe two scenarios where Secret Key Cryptography is more appropriate than Public Key Cryptography **(4 Marks)**

**QUESTION TWO (20 MARKS)**

- a) Explain the concept of nanotechnology and explain any two examples of real-world applications where nanotechnology has made a significant impact **(6 Marks)**
- b) Copycat Crime is a crime inspired by another crime that has been publicized in the news media or fictionally or artistically represented whereby the offender incorporates aspects of the original offense into a new crime. Discuss four ways media coverage contribute to the likelihood of copycat crimes **(8 Marks)**
- c) Finance crimes are property crimes that involve taking money or other property that belongs to someone else, and using it for your own benefit. Explain any three examples of finance crimes. **(6 Marks)**

**QUESTION THREE (20 MARKS)**

- a) Describe the term cyber terrorism, and explain two ways how cyber terrorism differ from other forms of cyber threats **(6 Marks)**
- b) Cyber-dependent crimes are offences that can only be committed using a computer, computer networks or other form of information communications technology (ICT). Describe five main forms of cyber-dependent crime. **(10 Marks)**
- c) Explain four innovative police technologies **(4 Marks)**

**QUESTION FOUR (20 Marks)**

- a) Describe any four emerging trends and threats in the field of cybercrime, considering technological advancements and evolving attack methods. **(8 Marks)**
- b) A cryptosystem is an implementation of cryptographic techniques and their accompanying Infrastructure to provide information security services. Explain six components of Cryptosystem **(6 Marks)**
- c) Information security policy is a set of policies issued by an organization to ensure that all information technology users within the domain of the organization or its networks comply with rules and guidelines related to the security of the information stored digitally at any point in the network or within the organization's boundaries of authority. Explain three Elements of Information Security Policy **(6 Marks)**

**QUESTION FIVE (20 Marks)**

- a) Compare and contrast cyber victimization experienced by individuals versus that experienced by organizations. **(6 Marks)**
- b) Describe four ways drones contribute to surveillance efforts in preventing and detecting criminal activities **(8 Marks)**
- c) Explain how the rise of technology contributed to the growth of cybercrime, and what role does digital forensics play in investigating cybercrimes **(6 Marks)**

