CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

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

CRSS 426: COMPUTER SECURITY

STREAMS: BA CRIMINOLOGY   **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 05/12/2018   **11.30 A.M. – 1.30 P.M.**

INSTRUCTIONS:

- **QUESTION ONE IS COMPULSORY AND ANY OTHER TWO**

QUESTION ONE: 30 MARKS

a) Write three practical goals of an Intrusion Detection System   (2 marks)

b) How can the following security parameters achieved :

c)

        i)   Integrity   (2 marks)
        ii)   Confidentiality   (2 marks)
        iii)   Availability   (2 marks)

d) What is a dictionary attack? Briefly describe the two types of dictionary attacks(4 marks)

e) Explain 4 ways in which cyber crime/computer crime is being used in committing credit card fraud   (4 marks)

f) Describe the following terms:

     i) Cyber-attack   (2 marks)

     ii). Computer fraud   (2 marks)

     iii). Online scam   (2 marks)

     iv). phishing   (2 marks)

g) What is computer security? (2 marks)

h) What is a countermeasure in computer security? Discuss at least three major countermeasures used. (4 marks)

QUESTION TWO: 20 MARKS

a) What are the two types of intrusion detection systems? Differentiate between them by writing their characteristics (8 marks)

b) What is cyberspace crime? Give examples (4 marks)

c) Describe some of the most common cyber-crimes in the world. (8 marks)

QUESTION THREE: 20 MARKS

a) Discuss at least THREE categories of threats in relation to computer security in details with appropriate examples (6 marks)

b) Explain measures and methods that are employed to counter cyberspace crimes across the globe. (5 marks)

c) Why is Digital Crime Scene Preservation and Documentation phase very important in achieving successful digital crime investigation (6 marks)

d) What is your understanding of an *exploitable* vulnerability? (3 marks)

QUESTION FOUR:20 MARKS

a) What is computer security policy? Discuss different types of computer security policy in details (8 marks)

 b) Describe the differences between cyber warfare and cyber terrorism (4 marks)

c) Explain why acquisition or imaging of exhibits very crucial in computer crime investigation process (6 marks)

e) What is an encryption key? (2marks)

QUESTION FIVE: 20 MARKS

d) How does one protect computers against cyber-attacks (4 marks)

e) Describe of Digital forensic investigation model in details   (8 marks)

f) How does ethical responsibilities affect cyberspace crimes?   (4 marks)

g) What is social engineering in relation to computer security?   (2 marks)

h) Define honey pots   (2 marks)