



# **JARAMOGI OGINGA ODONGA UNIVERSITY FOR SCIENCE & TECHNOLOGY**

**School of Informatics and Innovative Systems**

**Department of Computer Science and Software Engineering**

**KISUMU LEARNING CENTER**

**BSc Computer Security & Forensics**

**YEAR ONE: SEMESTER one**

**September - December 2013**

**Course Code: IIT 3225**

**Course Title: Ethical Hacking and Penetration Testing**

## **INSTRUCTIONS:**

- i. This paper contains five (5) questions.**
- ii. Question ONE is Compulsory and any other TWO questions**
- iii. Answer the questions on the booklet provided**

## Question 1 – 30 marks

- a) Define the terms below?
  - i.Hacker. (2 marks)
  - ii.Penetration Testing. (2 marks)
  - iii.Vulnerability. (2 marks)
  - iv.SQL Injection. (2 marks)
- b) Who is an ethic hacker? (2marks)
- c) What are 2 uses of the Whois website? (4 marks)
- d) What is the domain name of the whois site used in class this semester? (2 marks)
- e) What are 4 different types of soft infrastructure? (4 marks)
- f) What are 4 techniques for creating a backdoor in a system? (4 marks)
- g) State the 6 knowledge work activities that leading to the final results? (6 marks)

## Question two 20marks

- a) State 7 types of security to consider before penetration testing? (7 marks)
- b) What are 5 questions ethical hackers ask themselves before evaluating a systems security? (5 marks)
- c) What is the purpose of reconnaissance in ethical hacking? (2marks)
- d) What does SRP stand for and what is its application? (4marks)
- e) What is one advantage and one disadvantage of using a firewall? (2 marks)

## Question three 20marks

- a) What are 5 ways of events that are carried out to implement network security? (6marks)
- b) What are 3 types of common system thefts what are 2 of their individual characteristics? (9 marks)
- c) What are two ways to carry out social engineering? (2marks)
- d) What is crack and what is its use in network security? (3marks)

## Question four 20marks

- a) State and define 5 vulnerabilities you to secure a computer for? (10 marks)
- b) What are 2 standards of a security policy? (2marks)
- c) What are 4 areas covered by user level policy? (4 marks)
- d) What are 4 areas covered in system level policy? (4 marks)

## Question Five 20marks

- a. What are 5 legal hazards to watch out for when implementing an organizations' system security policy? (10 marks)
- b. What 5 activities are carried out when verifying trust on your system? (5 marks)
- c. What are 3 types of copyright infringement? (3marks)
- d. What are two types of trademark infringement? (2 marks)