KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016
THIRD SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS IN SECURITY MANAGEMENT AND POLICE STUDIES

KPS 408 : INFORMATION SECURITY SYSTEMS MANAGEMENT

DATE: FRIDAY 29TH JULY 2016 **TIME: 5.30 P.M. - 7.30 P.M.**

INSTRUCTIONS

Answer question ONE and any other TWO Questions

Question One (30 marks)

a) Define the term "Information security systems management". (2 marks)

b) Explain the three principles of information system security. (6 marks)

c) Define the following terms

i) Threat

ii) Countermeasure

iii) Risk management (6 marks)

d) Briefly explain the lifecycle of the security concept (8 marks)

e) Explain the term defense in depth (8 marks)

f) State and explain any three measures you can put in place to protect your system against unauthorized access and fraud. (6 marks)

Question Two (20 marks)

a) With aid of a suitable diagram describe the components of an information security management system. (10 marks)

b) BIDCO manufacturing of edible oil has decided to introduce information systems in its organization. The management has just realized that it is important to have well defined information security systems. You have been appointed as an information security officer in-charge of the security of all information systems and therefore part of the management. The tasks and duties of management is one of the management principles that you can observe for successful information security management.

Discuss this principle highlighting at least five points. (10 marks)

Question Three (20 marks)

Rhono company, a cement manufacturing company, has decided to automate its operations so as to remain competitive in the cent industry. The company has decided to develop a number of information systems. Before developing the information systems they have decided to seek advice from an information security management systems consultant who happens to be you. You have suggested to them that the starting point is to have a security plan.

Required:

i) Discuss the specific cases that the security plan will have to address. (4 marks)

ii) Discuss how you go about in developing a security plan for the company.(16 marks)

Questions four (20 marks)

Risk analysis is an important tool required in developing a security plan. Good, effective security planning includes a careful risk analysis/

Required

i) Demonstrate how the analysis tool is an important tool in the development of a good and effective security plan. (10 marks)

ii) Selecting a computer system asset of your choice demonstrate how you can apply step three and four of risk analysis to determine the appropriate control measure to put in place. (10 marks)

Question Five (20 marks)

a) Discuss the five rights that owner of a copyright act can do or authorize others to do. (10 marks)

b) Discuss the circumstances under which the employee cannot claim copyright from the employer (10 marks)