KIBABII UNIVERSITY

(KIBU)

UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR

SPECIAL/SUPPLEMENTARY EXAMINATIONS
YEAR THREE SEMESTER TWO EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF COMMERCE
(OPERATIONS AND INFORMATION SYSTEMS)

COURSE CODE : BCO 342

COURSE TITLE : COMPUTER SYSTEM SECURITY

DATE: 12/10/2018   TIME: 11:30 A.M - 1:30 A.M

INSTRUCTIONS TO CANDIDATES
ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUAESTION 1(30MARKS)

1. (a) Explain the following terms associated with computer security   (6marks)
       i. Confidentiality (1.5 mks)   iii. Authorization   (1.5 mks)
       ii. Authentication   (1.5 mks)   iv. Identification (1.5 mks)

     (b) List four reasons for enforcing computer security in our institutions   (4mks)

     (c) Passwords are a simple and most often used technology for authentication. State four

         Problems associated with passwords as a mean of authentication.   (4 marks)

     (d) Explain four major Purposes of Cryptography in computing g world.   (4marks)

     (e) Define firewall and explain how it works.   (4marks)

     (f) Wiretapping and Eavesdropping are example of computer crimes. List two Potential

         Offenders and two Methods of Detection   (4marks)

     (g) List four critical issues that could be used as base for formulating proper ICT or

         computer security policy in Kenya.   (4marks)

QUESTION 2 [20 MARKS]

2. You have been appointed Information systems Security Manager of Nakumatt Chain of Supermarkets.

Even though most transactions deal with cash payments, most people prefer not to use cash but prefer

other means.

     i.   List and explain the potential threats   **(6 marks)**

     ii.   Discuss in detail the process you will use to assess and control risk management issues.
                                                 (8marks)

     iii.   State and explain three Supermarket's consequences in case of system failure **(6 marks)**

QUESTION 3 [20 MARKS]

3. Due to frequent changes and improvements in ICT generally organizations face major

   challenges when deploying new platforms.

   i. State and explain three major security incidences that may be reported frequently.   (6marks)

   ii. Explain four ways or plans such that some of the incidences do not become disastrous in an

   organization.   (8marks)

   iii.   How would you deal with such disasters if they occur?   (6marks)

QUESTION 4 [20 MARKS]

4. An ICT manager is worried about the misuse of ICT facilities by certain members of staff and students

in Kibabii University:

   i. Discuss FOUR major issues of misuse of data that may be there.   (8marks)

   ii. Explain how such misuses can be identified   (6marks)

   iii.   State three ways dealing with them   (6marks)

QUESTION 5 [20 MARKS]

5. Attackers can control the application layer in your network system.

   i. Discuss four activities they do.   (8MARKS)

   ii. State four counter measures you can put in place to avoid attacks   (4marks)

   iii.   Discuss cryptographic technique you can use to avoid this attacks   (4marks)

   iv. What are some of the biometrics that can be used for authentication   (4 marks)