(Knowledge for Development)

KIBABII UNIVERSITY COLLEGE

A CONSTITUENT COLLEGE OF

MASINDE MULIRO UNIVERSITY OF

SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS

2014/2015 ACADEMIC YEAR

THIRD YEAR SECOND SEMESTER

MAIN EXAMINATION

FOR THE DEGREE OF

BACHELOR OFCOMMERCE

COURSE CODE: BCO 331

COURSE TITLE: SYSTEMS SECURITY

DATE: 30th APRIL, 2015   **TIME** 3.00PM-5.00PM

INSTRUCTIONS TO CANDIDATES

Answer Question One in Section A and Any other TWO (2) Questions in Section B

TIME: 2 Hours

Answer **Questions ONE a**nd **ANY OTHER TWO**

TIME: 2 Hours
Question one

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a) Explain any four firewall techniques (8mks)
b) Explain database security in relation to the following situations: (10 mks)
   i. Theft and fraud;
   ii. Loss of confidentiality ;
   iii. Loss of privacy;
   iv. Loss of integrity;
   v. Loss of availability.
c) Explain the purpose and scope of system security. (5mks)
d) Describe the two security measures provided by Microsoft Office Access (7mks).

Question two

Explain the following in terms of providing security for a system: (20 mks)
(a) Authorization; (3mks)
(b) Access controls;(3mks)
(c) Views; (2mks)
(d) Backup and recovery;(3mks)
(e) Integrity; (2mks)
(f) Encryption; (4mks)
(g) RAID technology.(3mks)
Question three

Describe the approaches for securing DBMSs on the Web. (20mks)

Question four

List the main types of threat that could affect a database system, and for each describe the controls that you would use to counteract each of them. (20 mks)

Question five

a) Examine any DBMS used by your organization and identify the security measures provided.(10 mks)
b) Identify the types of security approach that are used by your organization to secure any DBMSs that are accessible over the Web. (10 mks)