JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

UNIVERSITY EXAMINATIONS: 2013/2014

IIT 3222: INFORMATION TECHNOLOGY POLICY AND STRATEGY

KISUMU LEARNING CENTER

DATE: DECEMBER 2013   **TIME: 2 HOURS**

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**

      iv.   **Mobile Phones are not allowed in exams room**

QUESTION ONE 30 MARKS (COMPULSORY)

a) What's your understanding of the following in relation to information systems   {5 marks}

     i. Strategy

     ii. Policy

     iii. Standards

     iv. Practices

     v. Planning

b) Discuss the following in relation to security policy   {6 marks}

     i. EISP

     ii. ISSP

     iii. SysSP

c) What does an information security blueprint entail   {5 marks}

d) Discuss the six major types of information systems clearly illustrating how they are integrated in a business. {6 marks}

e) Define a Strategic Information System   {4 marks}

f) Clearly difference between policies, standards and practices, procedures , guidelines   {4 marks}

Question Two

a) Using an illustration , discuss the SecSDLC   {8 marks}

b) What are the main tasks undertaken in a SETA program   {6 marks}

c) Many organizations seek professional certification so that they can more easily identify the proficiency of job applicants. List at least SIX of these professional certifications.   {6 marks}

Question Three

a) ISO management model contains five areas. List these five areas and briefly discuss how each contributes to information security planning   {10 marks}

b) Information security planning can be divided into two namely organizational and contingency planning. Discuss the two areas with focus on JOOUST as an organization.   {6 marks}

c) Implementation of information security can be accomplished in two ways, elucidate   {4 marks}

Question Four

a) What are the basic elements of an ICT policy framework? List at least SEVEN elements   {7 marks}

b) Discuss what is entailed in the Business development framework of an ICT policy framework   {4 marks}

c) Has Kenya adopted an ICT strategy or master plan? Discuss giving examples for or against   {9 marks}

Question Five

a) Management has essential role in development, maintenance, and enforcement of information security policy, standards, practices, procedures, and guidelines. Discuss   {6 marks}

b) Elaborate on the following with respect to the design of security architecture   {6 marks}

       i. Defense in depth

      ii. Security perimeter

c) Explain the VISA international Security model   {8 marks}