JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

UNIVERSITY EXAMINATION FOR THE DEGREE OF MASTERS OF SCIENCE IN IT SECURITY AND AUDIT

1ST YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR

KISUMU CAMPUS

COURSE CODE: IIT 5125

COURSE TITLE: RESEARCH METHODS

EXAM VENUE: **STREAM: IT SECURIT AND AUDIT**

DATE: **EXAM SESSION: 2 HOURS**

TIME:

INSTRUCTIONS

1. **Answer Question ONE and ANY other TWO questions**
2. **Candidates are advised not to write on the question paper**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room**

Question 1 [15 marks]

Bogota ITSec Consulting is a startup IT Security Company based in Nairobi. They need your assistance with research work on specific project. Below is a summary of a brief statement from the consulting company. "Decision making by older people is complex with many options and sources of information which can be overwhelming, intimidating and very confusing. Enabling older people with technologies to enhance their decision-making capabilities is vital. Online communities provide older people with opportunities for information sharing and learning, for companionship and social support, for assisting with decision making, and for reducing isolation. However, security of these technologies has remained elusive. This project will investigate the impact of implementing proper security controls in online communities' platforms thus empowering older people to be more effective through their interaction with this digital technology."

Your role is to answer the following questions
  a) Identify the research problem **(2 marks)**
  b) State any three research objectives **(3 marks)**
  c) State any three research questions **(3 marks)**
  d) Identify the research paradigm you would adopt for this study and provide a justification **(2 marks)**
  e) Identify the research philosophy that informed your choices of the research paradigm above. **(2 marks)**
  f) Briefly discuss any three possible research strategies you would use in this study. **(3 marks)**

Question 2 [20 marks]

Research trends in Information Systems have focused on either design research (artifacts) or analytical (empirical or behavioral). Using an illustration discuss the stages of research in both design research (R&D) and (analytical or behavioral) research in IS. You MUST clearly document the stages in each category.

Question 3 [20 marks]

The research onion was developed by Saunders et al. (2007). It illustrates the stages that must be covered when developing a research strategy. When viewed from the outside, each layer of the onion describes a more detailed stage of the research process (Saunders et al., 2007). The research onion provides an effective progression through which a research methodology can be designed. Its usefulness lies in its adaptability for almost any type of research methodology and can be used in a variety of contexts (Bryman, 2012). In reference to this model discuss seven different types of research strategies and four different types of research philosophies.

Question 4 [20 marks]

a) According to Saunders *et. al.* (2007) and Cooper and Schindler (2006) research process involves six steps. Briefly describes these steps and outline their importance in IS research   (**10 marks)**

b) Joseph Maxwell in discussing the model of research design identifies five components, each of which addresses a different set of issues that are essential to the coherence of a study: Using a diagram discuss these five issues and their role in addressing rigor in Information Systems research.   (**10 marks)**

Question 5 [20 marks]

You have come to the end of your master's coursework and have approached Dr. Ogara to allow you do a presentation for your project proposal. You have chosen to use ***"Ethnography or Grounded Theory or Interpretivist Case Study"*** research strategy for your proposal. Take us through your PowerPoint presentation (use bullets only) on the important points that should be captured. In order to be more organized in your presentation, we will ask you to use the "Peel the Onion Layers Approach" which involves moving systematically from the outside layer of the onion where you articulate the philosophical assumptions to research paradigm until you get to the research techniques and procedures. Bear in mind the rigor that must be addressed such as validity and reliability, tools and others. Remember that the research philosophy you adopt contains important assumptions about the way in which you view the world. The assumptions you make will underpin your research paradigm, methodology and methods that you choose to conduct your research