



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN IT SECURITY AND AUDIT
1ST YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: ICD 6126

COURSE TITLE: IT RESEARCH AND PRACTICE

EXAM VENUE: STREAM: IT SECURITY AND AUDIT

DATE:17/1/25 EXAM SESSION: 14-17.00 HRS

TIME:3 HRS

INSTRUCTIONS

- 1. Answer ANY THREE 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 [20 marks]

Land ownership is a cornerstone of economic and social stability worldwide. However, land title management has long been plagued by issues such as fraud, inefficiency, and a lack of transparency. The urgency for change in land title systems becomes more evident when we consider the statistics from various regions. In Kenya, for instance, the Ministry of Lands reported a staggering 7,052 cases of property fraud in 2017, resulting in an annual cost to the economy of Sh60 billion. Additionally, the Justice Needs and Satisfaction in Kenya Survey by The Hague Institute for Innovation of Law revealed that land disputes affect between 2.4 and 2.8 million Kenyans. These numbers underscore the pressing need for more secure and transparent land title solutions that can mitigate these challenges.

Blockchain technology has emerged as a groundbreaking solution that has the potential to transform land title systems globally. By leveraging blockchain, countries can create a secure, transparent, and efficient system for recording and managing land titles, ushering in a new era of global land title solutions.”

Answer the following questions

- a) Identify the research problem. Justify your response **(2 marks)**
- b) State any two research objectives **(4 marks)**
- c) State any two research questions **(4 marks)**
- d) Identify and discuss the research philosophy that informed your choices of the research paradigm above. Provide a rationale for your choice. **(4 marks)**
- e) Briefly discuss the research methodology you would use in this study. Justify your answer. **(4 marks)**
- f) Discuss the data analysis technique you would adopt for this study **(2 marks)**

Question 2 [20 marks]

- a) Articulating theory in quantitative research is essential for providing a framework for understanding and explaining the relationships between variables. Theoretical contribution in research is crucial for many reasons. Discuss the process you follow in order to include theoretical contribution in your research. **(10 marks)**
- b) Converting a PhD thesis into publishable manuscripts can be a daunting task. Discuss the main components of a well structured manuscript **(10 marks)**

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) Many researchers have advocated for mixed methods research which combines qualitative and quantitative methods in ways that draw on the strengths of both traditions of inquiry and hence overcome problems associated with certain research inquiry. An example is Pinsonneault and Kraemer who reviewed 122 MIS surveys published from 1980 to 1990, and found that the survey research currently published in MIS suffered from five major problems: Discuss these problems. **(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 [15 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. **(7 marks)**
- b) Discuss four fundamental difference between Quantitative and Qualitative research approaches. Your discussion should strictly on research approaches, theory formulation, epistemological orientation and ontological orientation: **(8 marks)**