University of choice

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
SCHOOL OF AGRICULTURE, VETERINARY SCIENCES AND
TECHNOLOGY (SAVET)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023   ACADEMIC YEAR**

**MAIN EXAMINATION FOR THE
BSC. IN AGRICULTURAL EDUCATION AND EXTENSION, SAR, SAP**

COURSE CODE: SES 414

COURSE TITLE: ENVIRONMENTAL RISK ANALYSIS ANDMANAGEMENT

DATE: 11TH APRIL 2023   TIME: 12-2 PM

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and Any other TWO Questions.

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

SECTION A: (30 MARKS)

1. Define:
   (a) Environmental security (2mks)
   (b) Exploiting risk (2mks)
   (c) Risk assessment (2mks)

2. Environment risk management is not a single one – off exercise but a dynamic process. Discuss the components. (6mks)

3. Discuss the importance of good problem definition (8mks)

4. It is desirable that consensuses scored with both the decision maker and stakeholder on what is included and what is outside the score of assessment. (6mks)

QUESTION FIVE: (20 MARKS)

5. (a) Discuss key elements in planning a participatory risk assessment
   (10mks)
   (b) Describe the stages of risk assessment (10mks)

QUESTION SIX: (20 MARKS)

6. a). Discuss the conditions needed to establish a caused relationship between two items. (10mks)
   b). Describe how probabilities can be elicited. (10 mks)

QUESTION SEVEN: (20 MARKS)

7. a). Describe the techniques that are used when dealing with uncertainty within environmental risk assessment. (10 mks)
   b). Describe the stages involved in Risk assessment. (10 mks)