

(University of Choice)

# **MASINDE MULIRO UNIVERSITY OF**

## SCIENCE AND TECHNOLOGY (MMUST)

**MAIN CAMPUS** 

#### **UNIVERSITY EXAMINATIONS**

## **2021 / 2022 ACADEMIC YEAR**

### FIRST YEAR FIRST SEMESTER EXAMINATIONS

#### FOR THE DEGREE

**OF** 

### DOCTOR OF PHILOSOPHY IN DISASTER MANAGEMENT AND SUSTAINABLE DEVELOPMENT

**COURSE CODE:** 

**DSM 901** 

**COURSE TITLE:** 

**ENVIRONMENTAL VULNERABILITY TO HAZARDS AND DISASTERS** 

DATE: 20/04/2022

TIME: 9 - 12 NOON

#### **INSTRUCTIONS TO CANDIDATES**

1. This paper consists of FIVE questions

2. Each question carries twenty (20) marks

3. Attempt ANY FOUR questions

MMUST observes ZERO tolerance in examination cheating

This Paper consists of 2 printed pages, Please Turn Over



### **QUESTION ONE**

(a) Distinguish between Vulnerability and Hazard.

(5 Marks)

(b) Explain clearly why Vulnerability is the most important factor in disaster risk reduction. Give the relevant examples. (15Marks)

#### **QUESTION TWO**

Using examples, illustrate how economic, environmental, social and physical vulnerability factors of are interconnected. (20 Marks)

## **QUESTION THREE**

Globalization can influence vulnerability. Using examples, explain how globalization has increased vulnerability of some citizens in Kenya. (20 Marks)

#### **QUESTION FOUR**

Discuss briefly how a local community or indigenous knowledge has reduced vulnerability in Kenya. (20 Marks)

## **QUESTION FIVE**

With the help of a labeled diagram, discuss the concept of 'Progression of Vulnerability' in relation to Nairobi Pipeline Fire disaster of 2011 whereby about 100 persons perished. (20 Marks)