



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

UNIVERSITY EXAMINATIONS

2022/2023 ACADEMIC YEAR

**FIRST YEAR, SECOND SEMESTER EXAMINATIONS
FOR THE DEGREE**

OF

**MASTER OF SCIENCE IN DISASTER MANAGEMENT AND
SUSTAINABLE DEVELOPMENT**

COURSE CODE: DSM 808

COURSE TITLE: FIELD SKILLS

DATE: 18/4/2023

TIME: 8-11 AM.

INSTRUCTIONS TO CANDIDATES

Answer question **ONE (1)** and any other **TWO (2)** questions

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

Question ONE

- 1(a) Explain the prioritization of sources of drinking water for disaster intervention teams working in a drought-hit area in Northern Kenya. **(5 Marks)**
- (b) Explain the rationale and method used for the following activities during search and rescue operations on land:
- (i) Removal or stabilization of debris **(5 Marks)**
 - (ii) Leveraging and cribbing **(5 Marks)**
- (c) In many cases, search and rescue techniques on sea and air involve combined use of aircraft and surface vessels. Using suitable examples explain how this is achieved. **(10 Marks)**
- (d) (i) What is the purpose of disaster debriefing? **(2 Marks)**
- (ii) Explain the main types of debriefing after disasters **(3 Marks)**

Question TWO

- (a) Using suitable examples, distinguish between essential and non-essential items for camping. **(6 Marks)**
- (b) Explain the factors to consider while selecting a site for camping for a wildfire intervention in Mt. Kenya forest. **(5 Marks)**
- (c) Explain the use of hazard maps for environmental disaster interventions. **(4 Marks)**

Question THREE

Explain the technical preparedness and mitigation measures for the following hazards

- (a) Flooding in an area in the Kenyan Coastal zone. **(7 Marks)**
- (b) Landslides in an urban area in Central Kenya. **(8 Marks)**

Question FOUR

- (a) Discuss the core components of an incident command system (ICS). **(10 Marks)**
- (b) Discuss the challenges of implementation of the incident command system (ICS) in a specific fire incident that happened in an urban setting in Kenya. **(5 Marks)**