

APC



(University of Choice)

# MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS  
2022/2023 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER EXAMINATIONS

## MAIN EXAMINATION

FOR THE DEGREE OF  
BACHELOR OF SCIENCE IN DISASTER PREPAREDNESS AND  
ENVIRONMENTAL TECHNOLOGY

COURSE CODE: DPG 209

COURSE TITLE: GEO-INFORMATION IN DISASTER MANAGEMENT

DATE: 20/4/2023

TIME: 12-2 PM

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### INSTRUCTIONS TO CANDIDATES

This paper contains **four (4)** questions

Question **one (1)** is **compulsory** {total = 30 Marks}

Attempt **any other two (2)** {total = 40 Marks} from the remaining questions

Be brief and to the point

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

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

## **SECTION I: COMPULSORY {30 MARKS}**

### **Question ONE**

a] Define the following terminologies.

- i. Disaster (1 Mark)
- ii. Community (1 Mark)
- iii. Vulnerability (1 Mark)
- iv. Hazards (1 Mark)
- v. Risks (1 Mark)

b] Identify and explain the different types of disasters (10 Marks)

c] Describe the application of geo-informatics in disaster management (10 Marks)

d] Discuss the various phases of a disaster (5 Marks)

## **SECTION II: ATTEMPT ANY OTHER TWO (2) QUESTIONS {40 MARKS}**

### **Question TWO**

a] Discuss any two (2) types of vulnerabilities in disaster risk management (10 Marks)

b] Explain the concept of disaster zonation? (10 Marks)

### **Question THREE**

a] Discuss the effects of a drought disaster in Kenya (10 Marks)

b] Explain role of geo information in disaster response and emergency operation.

(10 Marks)

### **Question FOUR**

a] Name and briefly describe any four (4) major disasters common in Kenya in the last 10 years (10 Marks)

b] Explain the use of data in disaster preparedness and early warning (10 Marks)