



The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER-2019

**EXAMINATION FOR THE DEGREE OF BACHELOR IN DISASTER RISK
MANAGEMENT AND SUSTAINABLE DEVELOPMENT**

UNIT CODE: CODM 2101

UNIT TITLE: INTRODUCTION TO DISASTERS

DATE: DECEMBER, 2019

TIME:

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

LANDSLIDES IN MURANG'A CUT OFF TEA FARMS

House collapsed, gullies running all over, and farms and houses sliced into pieces. Springs appearing everywhere, even in areas that have never got water. And tea farms in parts of Kangema sub county cut off.

These are the scenes in Murang'a county after the long and heavy rains. About 500 household have been affected by the downpour, which left five dead, injured (a watchman in a coffee factory), transport disrupted and many people displaced.

In Kiagotho location, Kanyenyaini ward, Jennifer Wangui says every day there are new cracks on her one acre farm

“The tea leaves are ready for harvest but I’m afraid getting into farm in case there is more corrosion. I have never seen anything like this in the 45 years I have lived here”

The landslides that have always occurred in Murang'a county have not been this intense, the 55 year-old grandmother says

She says they have always experienced good rains, but this year's long rains season has been unusually heavy, leading to landslides and flooding.

Tea farming is her only source of income, and in good month, Wangui warns shs 50,000 shs 70,000 from her farm. But now she is helpless after the landslide hit her farm.

“I cannot pick tea leaves in the land affected. There are deep cracks that get worse every day, and I cannot risk my life” she says as she shows us the cracks.

WE are helpless and we don't know what to do. We are waiting for the county or national government to give the way forward”

Her neighbour Mary Muthoni had a double tragedy, with her house and tea farm being destroyed. She started noticing a small crack in one of her bedrooms and within a week, the crack had intensified and she could no longer live there.

“I was so afraid, I sought shelter in my neighbour's home, where I have been staying since” Muthoni says

QUESTION ONE

- (a) Discuss the vulnerabilities which could have led to the intensity of landslides described in the newspaper extract (6 marks)
- (b) If you had been hired as a disaster risk reduction advisor to the County Government of Muranga, what measures would you have recommended to be undertaken in Muranga County to reduce risks of landslide disasters (6 marks)
- (c) Supposing you were the in command of an Emergency Response Team in Kangema sub county at the time of the response to the landslides reported in the extract. What ethics in communication will you be guided with when working with media on providing information to the public (8 marks)
- (d) Discuss the classification of natural disasters (6 marks)
- (e) Differentiate between rapid onset disaster and slow onset disaster (4 marks)

QUESTION TWO

- (a) In the month of October 2019, floods disaster in which lives and property were experienced in many part of Kenya including Isiolo, Turkana and Narok town where the effects have been severe. Following the devastations caused by the floods, you were hire by the Government of Kenya to advice the government on the causes of the reported flood disasters and recommend measures to be undertaken to mitigate the floods in Kenyan cities
 - i) Explain the vulnerabilities which could have led to flood disasters in Narok town (12 marks)
 - ii) Discuss the measures you will recommend to be undertaken to mitigate flood disaster in Narok town (8 marks)

QUESTION THREE

- (a) Differentiate between a hazard and a disaster (2 marks)
- (b) Discuss the human factors that contribute to Tsunami disasters (8 marks)
- (c) Considering experience from Japan, evaluate the usefulness of structural and non-structural measures in mitigating tsunami disasters (10 marks)

QUESTION FOUR

- (a) Discuss the activities which should be carried out in different phases of drought management cycle (20 marks)

QUESTION FIVE

- (a) Explain how the following contribute to disasters
 - i) Rapid population expansion (6 marks)
 - ii) Rapid urbanization (7 marks)
 - iii) Destruction of water catchment (7 marks)