



# **The Co-operative University of Kenya**

## **END OF SEMESTER EXAMINATION DECEMBER-2016**

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

#### **UNIT CODE: CODM 2101**

#### **UNIT TITLE: INTRODUCTION TO DISASTERS**

**DATE:**

**TIME: 2 HOURS**

#### **INSTRUCTIONS:**

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

#### **QUESTION ONE**

- (a) Yesterday on 10<sup>th</sup> September 2016 an earthquake occurred in Bukoba, with tremors felt as far away as Rwanda, Uganda and Kenya. At least 13 people have been killed and 203 injured in north-west Tanzania in a 5.7 magnitude earthquake, local authorities said. “The toll has climbed from 11 people dead to 13 and from 192 injured to 203,” said Deodatus Kinawilo, district commissioner for Bukoba, the town close to the epicenter of the quake that struck on Saturday. “For now, the situation is calm and under control,” said Kinawilo, who was reached by telephone. “Some people have been discharged from hospital. We don’t expect many more injuries. We’ll see tomorrow.” Residents of Bukoba had said that some houses had caved in, and Augustine Ollomi, the Kagera province police chief in charge of the Bukoba district, said rescue operations were ongoing.

The epicenter of the quake was about 15 miles (25km) east of the north-western town of Nsunga on the border of Lake Victoria, according to the US geological Survey. An AFP correspondent in Dar es Salaam whose mother’s family lives in Bukoba said 10 family houses had collapsed. “My brother was driving around town, suddenly he heard the ground shaking and people starting running around and buildings were collapsing,” he said.

- i) What factors of vulnerability could have led to the earthquake disaster in Bukoba on 10<sup>th</sup> September 2016? (6 Marks)
- ii) What measures would you recommend to be undertaken to mitigate against earthquake disaster risk in Lake Region of Kenya where tremors were reported on 10<sup>th</sup> September 2016? (6 Marks)
- iii) Supposing you were a Disaster Response Manager in a humanitarian organization operating in Bukoba at the time of the earthquake disaster. What response measures would you carry out in Bukoba area during the first 12 hours after the earthquake occurrence? (8 Marks)
- iv) Explain the key features of a slow onset disaster. (2 Marks)
- v) Analyze the classification of natural disasters (4 Marks)
- vi) Analyze the key elements of disaster risk. (4 Marks)

#### **QUESTION TWO**

- (a) Differentiate between a hazard and a disaster. (2 Marks)
- (b) In the Month of October 2016, drought disaster was reported in Kenya, with impacts reported to be severe in Baringo, Kwale, Kilifi, Tana River and Garisa Counties. What vulnerabilities could have led to the great impacts of droughts in the counties? (8 Marks)

- (c) Supposing you are the County Executive Committee Member in charge of Department for Disaster Management in one of the counties which has been greatly affected by the drought. What measures will you undertake to respond to the reported drought disaster. (10 Marks)

**QUESTION THREE**

- (a) What is a Tsunami? (2 Marks)  
(b) Discuss the human factors that contribute to tsunami disasters. (8 Marks)  
(c) Discuss the measures that need to be put in place to mitigate against tsunami disasters. (10 Marks)

**QUESTION FOUR**

- (a) Explain how global warming contributes to disasters (10 Marks)  
Droughts disasters have increased in frequency and intensity in Kenya.  
(b) Introducing foreign plant and animal species in Kenya is a disaster. Discuss. (10 Marks)

**QUESTION FIVE**

- (a) List United Nation agencies that play different roles in disaster risk management. (5 Marks)  
(b) Discuss the functions of United Nations Disaster Management Teams in disaster management. (15 Marks)