



The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER-2019

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

UNIT CODE: CODM 3202

UNIT TITLE: DISASTER RISK AND VULNERABILITY

DATE: DECEMBER, 2019

TIME:

INSTRUCTIONS:

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

QUESTION ONE

In the month of October 2019, heavy floods were reported in different parts of Kenya in which many lives were lost

- (a) What factors vulnerability could be responsible to the heavy losses to floods experiences in ASAL counties of Kenya to floods (6 marks)
- (b) Supposing you were appointed by the Turkana County Government where flood effects were reported to have been networks map to be developed (8 marks)
- (c) Discuss the advantages of use of Geographic Information System (GIS) in hazard mapping (4 marks)
- (d) Analyze **THREE** categories of information categories of information obtained for use in Geographic information system hazard mapping (6 marks)
- (e) What flood mitigation measures will you recommend to be undertaken to treat the flood risks in Lodwar town in Turkana County (6 marks)

QUESTION TWO

- (a) Discuss the elements of disaster risk (4 marks)
- (b) Describe the steps involved in disaster risk assessment process (8 marks)
- (c) You have been hired as consultant by the Cooperative University to undertake fire disaster risk assessment in a building wh. One of the first assignment assigned is to carry out fire disaster risk assessment in its building. After undertaking the assignment, you find the risk to be unacceptable. What risk reduction treatment will you recommend for the identified risk in the university (8 marks)

QUESTION THREE

- (a) Describe the key components of a disaster risk assessment matrix (10 marks)
- (b) Supposing you are hired as County Executive Officer in charge of Disaster Management in a County in which communities have perceptions which hamper disaster risk reduction. Explain the measures you will undertake to change perceptions of risk among communities in the county (10 marks)

QUESTION FOUR

- (a) Differentiate between qualitative and quantitative hazard analysis (4 marks)
- (b) Describe the key aspects and indicators used in hazard characteristics (10 marks)
- (c) Explain the sources of information for hazard analysis (6 marks)

QUESTION FIVE

- (a) What is disaster mitigation (4 marks)
- (b) Discuss the measures which need to be put in place to mitigate against drought disasters in ASAL counties of Kenya (16 marks)