



The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER-2019

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

UNIT CODE: CODM 2406

UNIT TITLE: URBAN DISASTER PLANNING

DATE: DECEMBER, 2019

TIME:

INSTRUCTIONS:

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

QUESTION ONE

- (a) Discuss giving examples how change in climate is impacting urban areas (10 marks)
- (b) Discuss FIVE benefits of restoring ecosystem services in urban areas (10 marks)
- (c) Explain how urban sprawl affects urban environment and how the concept of zero carbon cities can assist in solving planning problems (10 marks)

QUESTION TWO

- (a) Explain FOUR challenges faced by County/local management in developing implementing and maintaining risk management (8 marks)
- (b) Discuss key features of (i) Grid model.Hippodamian plan (ii) sector and (iii) concentric zone theories that explain how towns are arranged (12 marks)

QUESTION THREE

- (a) Explain FIVE challenge experienced by organization that respond to urban disaster (10 marks)
- (b) Disaster events are complicated in urban area and required specific data collection tools in identifying affected population. Discuss FIVE community risk assessment data collection methods (10 marks)

QUESTION FOUR

- (a) Explain giving examples, urban green and blue infrastructure (6 marks)
- (b) Discuss SEVEN risk reduction actions in urban areas (14 marks)

QUESTION FIVE

- (a) Discuss SIX characteristics of resilient (12 marks)
- (b) Urban areas are more complex in terms of risk profiles and disaster response. Discuss characteristics that differentiate urban environment from rural and important implications in terms of risk governance when planning (8 marks)