



THE CO-OPERATIVE UNIVERSITY OF KENYA

END OF SEMESTER EXAMINATION DECEMBER -2022

**EXAMINATION FOR THE DEGREE OF BACHELOR OF CO-OPERATIVE AND
COMMUNITY DEVELOPMENT**

UNIT CODE: BDRM 2103

UNIT TITLE: NATURAL AND HUMANMADE DISASTERS

DATE: WEDNESDAY 21ST DECEMBER, 2022

TIME: 9:00 AM – 11:00 AM

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INSTRUCTIONS:

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

In 2005, the Kashmir region in Pakistan experienced an earthquake of 7.6 magnitude. The earthquake killed over 46,500 people, while 33,489 were injured. Around 329,600 houses collapsed, which resulted in displacement of over 2 million people.

Casualties and injuries in the region were attributed to the collapse of poor quality, single storey, unreinforced stone masonry buildings and reinforced concrete frame school buildings. It was observed that local people did not have knowledge about earthquake resilient construction technologies, the cost of which was beyond the capacity of the majority.

Kashmir is a predominantly rural society, with the majority living in small settlements on mountain sides. The rural economy mainly depends upon agriculture and livestock rearing. People do not have savings to use on improving their living or housing standards or to develop other income generating ventures. The second key source of income is remittances from migrants. In the earthquake affected area of Northern Kashmir, skilled people from the region migrate in search of better opportunities. Those left behind are mainly the unskilled, illiterate, women and the elderly. They are dependent for their survival upon remittances and are responsible for taking day-to-day decisions, such as about the construction of a house. Given the geography of the region and the lack of proper road infrastructure, it is extremely difficult for people to bring in construction materials such as steel, bricks and cement from outside even if they could afford it.

In the aftermath of the earthquake, the Earthquake Reconstruction and Rehabilitation Authority, in collaboration with the National Society of Earthquake Technology, have trained thousands of masons in safer construction practices. However, since local people cannot afford the higher wages demanded by the trained masons, many have left for cities, such as Karachi, where they are better paid.

QUESTION ONE

Read the above passage and answer the following.

- (a) Discuss some of the major impacts of the Kashmir region earth quake of 2005. (10marks)
- (b) Discuss some of the factor contributing to earthquake vulnerability in the Kashmir region (7marks)
- (c) Discuss some of the risk reduction measures that may be used in the Kashmir region (8marks)

(d) Discuss ways in which the Kashmir region community can participate in earthquake mitigation.

(5marks)

QUESTION TWO

(a) With use of examples, differentiate between the following terms;

(i) Sudden and slow onset disasters (3marks)

(ii) Human made and Natural disasters. (3marks)

(iii) Disaster and Hazard. (3marks)

(iv) Risk and vulnerability. (3marks)

(b) Describe the disaster cycle citing the major distinctions between slow onset and sudden onset disasters. (8marks)

QUESTION THREE

(a) Define the term contingency planning. (2marks)

(b) Describe the steps in drought contingency planning. ((8marks)

(c) Describe the content of drought contingency plan. (10marks)

QUESTION FOUR

(a) Define the term early warning. (2marks)

(b) Discuss the components of early warning. (10marks)

(c) Discuss some of the methods you would use to disseminate early warning to the community in a flood prone area. (8marks)

QUESTION FIVE

(a) Define the term disaster preparedness. (2marks)

(b) Explain the component of a disaster preparedness plan. (12marks)