

NATIONAL UNIVERSITY OF LESOTHO
BSc ENVIRONMENTAL HEALTH
END OF SEMESTER B EXAMINATIONS

MAY 2023

TIME: 3 HOURS

FHS4301: EMERGENCY PREPAREDNESS AND RESPONSE

100 Marks

Instructions to candidates

1. Answer **ALL** questions in sections A and B the paper.
 2. Each question must be started on a new page.
-

SECTION A

Select the letter that corresponds to the correct answer.

[1 mark*10]

1. **An example of a tectonic hazard is ____**
 - A. Army worm infestation
 - B. Earthquake
 - C. Drought
2. **If a Disaster Manager was operating in the disaster phase that is in the immediate aftermath of the disaster, he/she would be operating in the ____ .**
 - A. Impact and flight phase
 - B. Acute phase
 - C. Repatriation phase
3. **The capacity of a health sector to detect, identify, and respond to a hazard and its health consequences at the given scale is influenced by the:**
 - A. Existence of community knowledge about the hazard and its mitigation
 - B. Functional capacity of local governance to manage expected affected cases;
 - C. None of the above

- 4. Which of the following represent stages of the disaster management cycle that can be implemented before the impact of a hazard?**
- A. Recovery, response and mitigation
 - B. Emergency, recovery and preparedness
 - C. Preparedness, mitigation and response
- 5. Which of the following is the required amount of water per capita per day during emergencies and disasters according to the United Nations?**
- A. 9-15L
 - B. 10-15L
 - C. 15-20L
- 6. Which of the following is NOT a disaster preparedness measure?**
- A. Relocating people from camps to homes
 - B. Rehearsals of emergency plans
 - C. Public education on hazards
- 7. The sequence of events undertaken in disaster preparedness is:**
- A. Situational analysis, Team formation, goal formulation, plan development, plan approval
 - B. Team formation, situational analysis, goal formulation, plan development, plan approval
 - C. Team formation, goal formulation, Situational analysis, plan development, plan approval
- 8. Which of the following personnel is not a member of the District Emergency Preparedness and Response Team in Lesotho?**
- A. District Administrator
 - B. Director General of Health Services
 - C. Medical Superintendent
- 9. The Sendai Framework for Disaster Risk Reduction is mostly aligned to disaster_____**
- A. Mitigation
 - B. Preparedness
 - C. Response
- 10. Two hazards that often cause emergencies in the SADC region in recent times are:**
- A. Drought, floods and tsunamis
 - B. Floods, Storms and Brucellosis
 - C. Tropical cyclones, wild fires and Landslides

SECTION B

QUESTION 1 [20]

Define the following terms as used in Emergency Preparedness and Response, and give an example to demonstrate understanding:

- a) Recovery; [4]
- b) Mitigation; [4]
- c) Exposure; [4]
- d) Emergency; [4]
- e) Hazard. [4]

QUESTION 2 [22]

- a) Explain the causes of the following hazards:
 - i. Tsunami; [4]
 - ii. Earthquake; [4]
 - iii. Landslide; [4]
 - iv. Technological. [4]

- b) Differentiate between the following terms and concepts:
 - i. Risk and Hazard; [2]
 - ii. Grade 1 and Grade 2 public health emergencies in Lesotho; [2]
 - iii. Vulnerability assessment and Post-disaster needs assessment. [2]

QUESTION 3 [26]

A major landslide befalls a tropical, rural town of 3500 residents in a poor country that is commonly hit by landslides. Access to the town is cut due to damage to the single road that connects the town to other settlements. Most of the adult residents make a living from artisan mining for minerals. The majority of the mining operations are engulfed by the landslide. In the aftermath, 455 people are confirmed dead and 810 more are missing. The landslide occurs just one month before the harvesting of staple crops and 60% of the town's arable land has also been rendered unusable. There is a shortage of basic needs and survivors are unable to cope by themselves.

- a) Mention any 2 highly likely public health impacts of this event and their cause; [2]

- b) With justification, advise public authorities on whether a disaster has occurred. [2]
- c) State one population that is highly vulnerable in the affected area and explain why it is vulnerable; [2]
- d) Suppose you are a member of the Emergency Preparedness and Response Team (EPRT) in the town, outline the actions your team should have undertaken to prepare for landslides; [10]
- e) Outline the requirements for the Incident Command System that should be used to respond to the event. [10]

QUESTION 4 [22]

- a) Mention any 4 structures outlined for coordinating disasters in the Lesotho Disaster Management Act No. 2 (1997); [4]
- b) State 2 functions each for **any 3** of the structures mentioned in 4 a) above; [6]
- c) Briefly discuss the role of the following entities in the management of emergencies and disasters:
 - i. United Nations; [4]
 - ii. Communities/the general public; [4]
 - iii. Private sector [4]

.....END OF PAPER.....