

THE NATIONAL UNIVERSITY OF LESOTHO

BSc. ENVIRONMENTAL HEALTH

END OF SEMESTER EXAMINATIONS-JANUARY 2024

VECTOR AND VERMIN CONTROL (EHS2302)

DURATION: 3 HRS

MARKS:100

INSTRUCTIONS:

- Answer **ALL** questions
- Each question must be started on a new page

QUESTION1

[4*5]

Explain the following terms and phrases as used in Vector and Vermin control.

- a) Nocturnal activity
- b) Engorged organism
- c) Proboscis
- d) Dietary versatility
- e) Light traps

QUESTION2

- a) State any three(3) equipment used in cockroach control and indicate its uses [6]
- b) Explain the important of understanding a vector's habits to an EHP. [4]
- c) Discuss the process of estimating the number of rodents in the building. [10]

QUESTION3

If there is bed bug infestation, it is best to find it early, before the infestation becomes established or spreads. Treating a minor infestation, is far less costly and easier than treating the same infestation after it becomes more widespread.

However, low-level infestations are also much more challenging to find and correctly identify. Other insects, such as carpet beetles, can be easily mistaken for bed bugs. If you misidentify a bed bug infestation, it gives the bugs more time to spread to other areas of the house or hitchhike a ride to someone else's house to start a new infestation.

Bites on the skin are a poor indicator of a bed bug infestation. Bed bug bites can look like bites from other insects (such as mosquitoes or chiggers), rashes (such as eczema or fungal infections), or even hives. Some people do not react to bed bug bites at all.

- a) Mention any four environmental factors favouring survival of bedbugs. [4]
- b) Discuss how an EHP can tell that the place is infested with bedbugs. [8]
- c) Explain the Importance of life cycle to an EHP. [3]
- d) Discuss any five reasons for failure of vector control strategies. [15]

QUESTION4

You are an EHP in a community where there has been an increase in reported cases of flea-borne diseases among both humans and pets. The local residents are concerned about the potential health risks and are seeking guidance on how to protect themselves and their animals.

Discuss the steps you would take to educate the community about flea-borne diseases, control the flea population, and mitigate the risk of disease transmission. [30]