

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2017/18

TITLE OF PAPER: Mammalian Conservation

COURSE CODE: BIO613

TIME ALLOWED: THREE HOURS

INSTRUCTIONS:

1. THE EXAMINATION HAS FOUR (4) QUESTIONS. ANSWER ANY THREE (3).
2. EACH QUESTION CARRIES 30 MARKS.
3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE.

SPECIAL REQUIREMENTS: NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATORS

QUESTION 1

Discuss the evolutionary history of African mammals. Explain how the mammalian fauna of the African continent has arisen. Make sure to describe the various colonization events, and the groups that evolved *in situ*.

[30 Marks]

QUESTION 2

The IUCN has defined a number of categories to describe the conservation status of plants and animals. Describe these various categories and explain what each category means. Then describe how mammal species are assigned to these various categories. Finally, explain why this exercise is useful for the conservation of biodiversity.

[30 Marks]

QUESTION 3

“Large carnivores are incompatible with humanity and are therefore doomed to extinction”. Discuss this statement.

[30 Marks]

QUESTION 4

Bats provide valuable ecosystem services. Describe these services and provide real-life examples to illustrate your answer. Do these positive services out-weigh the negative impacts of disease transmission and crop damage (by fruit bats)?

[30 Marks]