

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2013/14

TITLE OF PAPER: AFRICAN ECOLOGY AND CONSERVATION

COURSE CODE: ERM612

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

What are MVP (Minimum Viable Population) and PVA (Population Viability Analysis)? What role do they play in conservation of biodiversity? Make sure that you provide detailed descriptions of how these two tools operate before you elaborate on their roles.

[30 Marks]

QUESTION 2

Explain how the field of reserve design and selection has developed in the past 3 decades.

[30 Marks]

QUESTION 3

Are the populations of animal species regulated top-down? Or bottom-up? Provide a critical review of this field.

[30 Marks]

QUESTION 4

What are the most severe threats facing African biodiversity? List these threats, and then give a detailed analysis of how each threat is affecting biodiversity. Provide real-life examples to illustrate your answer.

[30 Marks]