

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2016/17

TITLE OF PAPER: PREDICTIVE NICHE MODELLING

COURSE CODE: BIO612

TIME ALLOWED: THREE HOURS

INSTRUCTIONS:

1. THE EXAMINATION HAS THREE (3) QUESTIONS. ANSWER ALL.
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 is niche modelling? Explain in detail the approach and analysis taken by niche modelling. Include in your discussion how we should interpret the maps produced by niche models. [30 marks]

QUESTION 2

“MaxEnt is no better than any other niche modelling approach”. Critically discuss this statement. [30 marks]

QUESTION 3

Explain how niche modelling can be used to make predictions about future distributions of plants and animals. [30 marks]

END OF EXAMINATION PAPER