

UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER 2012/2013

TITLE OF PAPER: EVOLUTION

COURSE CODE: B403

TIME ALLOWED: THREE (3) HOURS

- INSTRUCTIONS:**
1. ANSWER ANY FOUR QUESTIONS.
 2. EACH QUESTION CARRIES TWENTY FIVE (25) MARKS.
 3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELED DIAGRAMS WHERE APPROPRIATE.

SPECIAL REQUIREMENTS:

NONE

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

ANSWER ANY FOUR (4) OUT OF THE SIX (6) QUESTIONS

QUESTION 1

Explain how isolating mechanisms may achieve separation of gene pools.

[25 marks]

QUESTION 2

Discuss and give FIVE reasons why most populations are polymorphic.

[25 marks]

QUESTION 3

“Phenetics is subjective and unnatural, and should not be used to classify organisms”.
Discuss this statement, elaborating on what constitutes an objective and natural classification system.

[25 marks]

QUESTION 4

Provide an account of the process of allopatric speciation.

[25 marks]

QUESTION 5

How have the Pleistocene ice ages shaped the sub-Saharan African environment?

[25 marks]

QUESTION 6

Describe evolutionary trends in the subfamily Homininae.

[25 marks]