

**UNIVERSITY OF SWAZILAND  
MAIN EXAMINATION PAPER 2015/2016**

**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 why ecological considerations are not enough to explain the broad-scale distributions of plants and animals.

[25 marks]

**QUESTION 2**

Discuss evolutionary trends in the subfamily Homininae.

[25 marks]

**QUESTION 3**

Discuss the different genetic modes of speciation.

[25 marks]

**QUESTION 4**

“Systematics is irrelevant to conservation”. Critically discuss this statement.

[25 marks]

**QUESTION 5**

Describe “isolating mechanisms”, using examples to illustrate your answer.

[25 marks]

**QUESTION 6**

Discuss and give FIVE reasons why most populations are polymorphic.

[25 marks]