

**UNIVERSITY OF SWAZILAND**

**DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND  
PLANNING**

**FINAL EXAMINATION, MAY 2015**

**TITLE OF PAPER : ENVIRONMENTAL GEOMORPHOLOGY**

**COURSE NUMBER : ERM 624**

**TIME ALLOWED : 3 hours**

**INSTRUCTIONS : ANSWER ANY TWO QUESTIONS  
ILLUSTRATE YOUR ANSWERS  
WITH APPROPRIATE DIAGRAMS**

**MARKS ALLOCATED : EACH QUESTION CARRIES 50 MARKS**

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

**ANSWER ANY TWO QUESTIONS**

**QUESTION 1:**

- a) Discuss which long-term climatic changes are expected for the southern African region, and how these may impact on agricultural production in Swaziland.

(25 marks)

- b) Evaluate the efforts currently undertaken, and how effective these may be for the maintenance of the current climatic conditions in southern Africa.

(25 marks)

**(50 MARKS)**

**QUESTION 2:**

- a) Discuss the term "Geosite", and distinguish it from terms like "Game Reserves", "National Parks" and "Heritage Sites".

(25 marks)

- b) Using examples discuss how geosites may contribute to income-generating effects at their respective locations and the overall revenue of a country.

(25 marks)

**(50 MARKS)**

**QUESTION 3:**

- a) Critically evaluate the importance of Banded Iron Formation (BIF) as an ore deposit, that has played historically an important role in Swaziland's infrastructure and economic development.

(25 marks)

- b) Explain why the production of iron ore from Ngwenya was successfully carried out in the 1960s and 1970s, then abruptly stopped for about 4 decades, and since about 3 years has been reintroduced.

(25 marks)

**(50 MARKS)**

**QUESTION 4:**

Using examples from Swaziland, discuss how you would restore a former mining area considering the environmental damages that have altered this area during the period of mining activities.

**(50 MARKS)**