UNIVERSITY OF SWAZILAND

DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

FINAL EXAMINATION (2013/2014), May 2014

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TITLE OF PAPER

PHYSICAL RESOURCES

COURSE NUMBER

GEP 216

TIME ALLOWED

3 hours

INSTRUCTIONS

SECTION A IS COMPULSORY

ANSWER ANY TWO QUESTIONS

FROM SECTION B

ILLUSTRATE YOUR ANSWERS WITH

APPROPRIATE DIAGRAMS

MARKS ALLOCATED

QUESTION 1 CARRIES 40 MARKS

THE OTHER QUESTIONS CARRY

30 MARKS EACH

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

SECTION A: COMPULSORY QUESTION

QUESTION 1:

Discuss the following terms by using examples from the mining industry of Swaziland.

a) Profitability (13 marks)
b) Economic growth (13 marks)
c) Environmental sustainability (14 marks)
(40 marks)

SECTION B: ANSWER ANY TWO QUESTIONS

QUESTION 2:

Using examples, describe sedimentary, igneous and metamorphic rocks that yield specific natural resources. (30 marks)

QUESTION 3:

- a) Using examples, identify lakes in East Africa that are characterized by an abnormally high salinity and alkalinity. (10 marks)
- b) Explain why abnormally high salinity and alkalinity characterize some lakes in East Africa. (10 marks)
- d) Discuss under which environmental conditions these lakes were formed.

(10 marks)

(30 marks)

OUESTION 4:

- a) Discuss why global increase of temperatures is a risk for human beings (15 marks)
- b) Explain why it is preferable to maintain the present climatic conditions.

(15 marks)

(30 Marks)

QUESTION 5:

a) Discuss what is understood by the term 'Banded Iron Formation' (10 marks)

b) Explain why and when this rock type was deposited during geological history. Give examples from Swaziland. (20 marks)
(30 Marks)