# UNIVERSITY OF SWAZILAND DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING **FINAL EXAMNIATION, MAY 2008** (BASS, BED, BAH)

TITLE OF PAPER:

PHYSICAL RESOURCES

COURSE CODE:

**GEP 216** 

TIME ALLOWED:

THREE HOURS

**INSTRUCTIONS:** 

**ANSWER QUESTION ONE AND** 

**ANY OTHER TWO QUESTIONS** 

MARKS ALLOCATED:

QUESTION 1 CARRIES 40

MARKS.

THE OTHER

**QUESTIONS CARRY 30 MARKS** 

EACH

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#### **SECTION A**

# QUESTION 1 (COMPULSORY)

- a. Describe the weathering processes which are dominant in the low latitudes? (15 marks)
- b. Explain how plate movements may result in the destruction of the lithosphere and the creation of new plates. (10 marks)
- c. Describe how any three anthropogenic activities are contributing to climate change. (15 marks)

(40 marks)

#### **SECTION B**

#### **ANSWER ANY TWO QUESTIONS**

#### **QUESTION 2**

- a. Discuss the role of pressure and Coriolis force on wind speed and direction.
  (15 marks)
- b. Describe the various ways through which atmospheric air may become saturated. (15 marks)

(30 marks)

### **QUESTION 3**

Discuss the main forces which cause plates to move and the dominant tectonic features that could occur at the various boundaries. (30 marks)

## **QUESTION 4**

Using diagrams, describe how magma in the lithosphere may end up as an igneous, sedimentary or metamorphic rock on the surface of the earth.

(30 marks)

### **QUESTION 5**

- a. Using a well labeled diagram, illustrate the various temperature strata of the atmosphere. (15 marks)
- b. Explain why the earth experiences differences in rainfall.

(30 marks)

(15 marks)