



"Investing in Africa's Future"

**COLLEGE OF SOCIAL SCIENCES, THEOLOGY HUMANITIES
AND EDUCATION
DEPARTMENT OF EDUCATION**

**HES 321 ADVANCED STUDIES IN GEOMORPHOLOGY AND SOIL GEOGRAPHY
END OF FIRST SEMESTER EXAMINATIONS**

JANUARY 2018

LECTURER: G. R. CHIMONYO

DURATION: THREE HOURS

INSTRUCTIONS

1. Do NOT write your name on the answer sheet
2. Use answer sheets provided
3. Answer **THREE (3)** questions, **ONE** from **SECTION A** and **ONE** from **SECTION B** and the third question from either **Section A or Section B**
4. Read and understand all questions and instructions before your answer
5. Where necessary, illustrate your answers with sketches, figures and diagrams
6. **Each question is marked out of 20 marks**
7. **Take note of mark distribution in each question**
8. Begin your answer for each question on a new page
9. Credit is given to neat presentation of answers



SECTION A: GEOMORPHOLGY

Question One

Examine the relevance of the theories of peneplanation and pediplanation in slope development with reference to tropical environments.

Question Two

Explain the three degradational processes in landform development.

Question Three

Give your understanding of the following volcanic landforms:

- | | |
|----------------------|-----------|
| (a) Shield volcanoes | (8 marks) |
| (b) Stratovolcanoes | (8 marks) |
| (c) Calderas | (4 marks) |

Question Four

Review the landforms that are associated with the three types of movements of tectonic plates.

SECTION B: SOIL GEOGRAPHY

Question Five

Give an explanation of the following:

- | | |
|--|------------|
| (a) How soil colour is determined | (10 marks) |
| (b) Your understanding of the term 'soil structure'. | (10 marks) |

Question Six

Examine the importance of climate in the soil formation process.

Question Seven

Explain the interaction of climate and topography in the development of the soil profile.

Question Eight

Give an explanation of the relationship between slope development and soil formation.

