

# **FACULTY OF SCIENCE**

# DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL MANAGEMENT & ENERGY STUDIES

MODULE 16GGR20047

**GEOMORPHOLOGY** 

CAMPUS APK

EXAM June 2019

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DURATION 3 HOURS MARKS 100

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**NUMBER OF PAGES: 3 Pages** 

**INSTRUCTIONS:** 

NB! Answer all questions as per instruction

### **QUESTION 1**

Refer to the statements below, summarise each of the statements made, outline its significance at the time of publication, and expand on its relevance to present day Geomorphology.

- a) "The essential reason for recognizing the Quaternary is climatic. The record of its history is stratigraphic." Russell, 1964.
- b) "The interpretation of former environments from palaeosols rests, as in other fields of Quaternary investigation, on the uniformitarian principle of inferring past conditions from the perceived relationships between present-day soils and environments." Lowe & Walker, 1984.
- c) "Geography, and in particular, physical geography (geomorphology) is seen as contributing little to contemporary challenges in South Africa, such as ensuring food and water security, resolving inequality, or in poverty reduction and economic growth." Holmes et al., 2016.

[3x10]

## **QUESTION 2**

Identify each of the features indicated in photographs a and b. Briefly explain their geomorphic formation. Discuss their significance in understanding past climates.



a)



[2x10]

# **QUESTION 3**

Select ONE question.

Explain how geomorphological research contributes to a better understanding of the southern African Quaternary. Refer to examples and case studies

OR

Outline the development in geographic thought regarding the role of fluvial erosion in shaping landscape geomorphology. Include the names of key geomorphologists and their theoretical position. Discuss the aspects of their theories which remain in use today.

[50]

TOTAL: [100]