



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN EARTH SCIENCE WITH
INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

**NGA 210: QUATERNARY GEOMORPHOLOGY OF EAST
AFRICA**

Date: 1st April, 2014

Time: 11.15am - 1.30pm

INSTRUCTIONS:

- Answer QUESTION ONE and any other TWO questions.
- Sketch maps and diagrams should be used whenever appropriate.



NGA 210: QUATERNARY GEOMORPHOLOGY OF EASTERN AFRICA

1. a) Distinguish between the following:
 - i) Isotope analysis and relative dating. [6 marks]
 - ii) Eustatic and Isostatic sea level change. [6 marks]
 - iii) Geoarchaeology and documentary records. [6 marks]
- b) Write short notes on:
 - i) Eccentricity and obliquity. [6 marks]
 - ii) Lake sediments deposits in East Africa. [6 marks]
2. a) Assess the main factors influencing river environments during the Quaternary period. [10 marks]
- b) Discuss paleomagnetism method of dating earth materials. [10 marks]
3. Examine the fringing reefs and landforms and their associated coastal landform during Quaternary Period. [20 marks]
4. Explain the glacial cycles changes experienced in Eastern Africa during the Quaternary period. [20 marks]

5. Examine the paleoclimatic proxy methods used to reconstruct past climate dynamics [20 marks]
6. Examine the Arabian Nubian Shield and the associated sediments. [20 marks]