



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

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

(MAIN CAMPUS)

**NGA 101: INTRODUCTION TO EARTH SCIENCE
SYSTEMS**

Date: 19th November, 2013

Time: 11.00 a.m. - 1.00 p.m.

INSTRUCTIONS:

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

NGA 101: INTRODUCTION TO EARTH SCIENCE SYSTEMS

1. a. Explain three major causes of continental movement. (9 Marks)
- b. Differentiate between the following
 - i. Lithosphere and asthenosphere. (4 marks)
 - ii. Biome and ecosystem. (4 marks)
 - iii. Open structure communities and Rare species communities. (4marks)
- c. Write concise notes on the following:
 - i. Temperate grassland ecosystem (5 marks)
 - ii. Convergent tectonic boundary (4 marks)
2. a. Describe various types of sedimentary rocks. (10 marks)
- b. Discuss the significance of the hydrological cycle in the earth system. (10 marks)
3. a. Explain the concept of relative plate motion. (8 marks)
- b. Examine the main horizons in a soil profile. (12 marks)
4. a. Account for the major global water resources storages. (10 marks)
- b. Examine the characteristics of mangrove forests. (10marks)
5. a. Examine the physical characteristics of a mineral. (8 marks)
- b. Describe various layers of the atmosphere (12 marks)
6. Discuss the main classification of fresh water organisms in an ecosystem. (20 marks)