



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

**FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN SOIL SCIENCE &
PLANT NUTRITION, BACHELOR OF SCIENCE IN AGRONOMY
AND BACHELOR OF HORTICULTURE WITH INFORMATION
TECHNOLOGY**

(MAIN CAMPUS)

ASS 101: INTRODUCTION TO SOIL SCIENCE

Date: 2nd December, 2013,

Time: 8.30 - 10.30 a.m.

INSTRUCTIONS:

- **Answer ALL questions in Section A and ANY TWO questions in Section B.**

INSTRUCTIONS:

This paper comprises sections A and B.

Answer ALL questions in section A and any TWO questions in section B.

SECTION A

Q1. Explain the following in the context of soil science: (5 marks)

- a) Pedology
- b) Edaphology
- c) Magma
- d) Pedosphere
- e) Rock metamorphism

Q2. Distinguish between the following: (10 marks)

- a) Extrusive and intrusive igneous rocks
- b) Primary mineral and secondary mineral
- c) Alluvial parent material and fluvial fans parent material
- d) Endogenetic sedimentary rock and exogenetic sedimentary rock
- e) Contact metamorphic rock and regional metamorphic rock

Q3. Outline the following: (15 marks)

- a) Distinguishing characteristics of organic soils
- b) Transported parent materials

SECTION B

Q4. Discuss the physical processes involved in the formation of mineral soils. (20 marks)

Q5. Discuss the formation of Histosols (20 marks)

Q6). Discuss the role of 5 soil-forming factors in soil formation. (20 marks)