

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS
RESIT/SPECIAL EXAMINATION**

**EXAMINATION FOR THE AWARD OF CERTIFICATE IN ANIMAL HEALTH AND
PRODUCTION**

SOIL 00100: SOIL SCIENCE

STREAMS: CERT. ANHE Y1S1

TIME: 2 HOURS

DAY/DATE: TUESDAY 02/02/2021

2.30 P.M – 4.30 P.M.

INSTRUCTIONS

- Answer ALL questions in section A (40 Marks)
- Any two in section B (30 Marks)

1a). Briefly describe the composition of a well-managed soil. (5marks)

b) .)Discuss the four basic processes that determine how the five soil forming factors affect soil development (soil genesis). (8 marks)

2. Discuss seven (7)functions of water in relation to plant growth and development. (7 marks)

b) Briefly explainany four Indicators of damaged soil structure. (5 marks)

3a). Briefly describe how would you carry out moist ball tests and ribbon soil textural tests in the field (4 marks)

b). Explain the rock cycle. (6 marks)

briefly Describe the main three (3) types of Sedimentary rocks. (5 marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

4a) Describe carbonation reaction as a principle of chemical weathering. (9 marks)

4b) Briefly explain the Classification of soil soils according to the prevailing climate in which they are developed and the vegetation which is associated with them. (6 marks)

5a) Briefly describe any six (6) importance of weathering.

5b) Describe how biotic organisms/activities influences soil formation. (9 marks)

6a) Discuss the advantages and disadvantages of using manure fertilizers. (9 marks)

6b) Discuss the Beneficial and Harmful effects of soil organisms in agricultural soils. (6 marks)
