

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

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

**SOIL 0100: SOIL SCIENCE**

**STREAMS: DIP. ANHE**

**TIME: 2 HOURS**

**DAY/DATE: FRIDAY 07/12/2018**

**11.30 A.M. – 1.30 P.M.**

**INSTRUCTIONS: Answer ALL questions in section A any TWO in section B**

**SECTION A**

**QUESTION ONE**

- (a) Explain any two (2) factors that determine soil development [4 marks]
- (b) Describe the features of andosols [3 marks]

**QUESTION TWO**

- (a) Explain agriculture soil conservation ways [6 marks]
- (b) Classify rocks by the processes of their formation [3 marks]

**QUESTION THREE**

- (a) Discuss podsolization as a pedogenic process [4 marks]
- (b) Describe any two mechanisms of soil aggregation [4 marks]

**QUESTION FOUR**

- (a) Discuss the main objectives of soil survey [2 marks]
- (b) Distinguish between surface and subsurface drainage [4 marks]

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**SECTION B – ANSWER TWO QUESTIONS**

**QUESTION FIVE**

- (a) Explain the ways through which water is lost from soil [9 marks]
- (b) Explain any three (3) primary minerals found in soil [6 marks]

**QUESTION SIX**

- (a) Discuss the factors that affect irrigation water use efficiency [6 marks]
- (b) Describe the crystalline rocks [9 marks]

**QUESTION SEVEN**

- (a) Explain gleization as a pedogenic process [7 marks]
  - (b) Explain the typical information in a published soil survey report of a given area [8 marks]
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