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*(Knowledge for Development)*

# **KIBABII UNIVERSITY**

## **UNIVERSITY EXAMINATIONS 2016/2017 ACADEMIC YEAR**

### **THIRD YEAR 1ST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE AND  
BIOTECHNOLOGY & BACHELOR OF EDUCATION SCIENCE**

**COURSE CODE: SAB 310**

**COURSE TITLE: SOIL MORPHOLOGY AND CLASSIFICATION**

**DATE: 15<sup>TH</sup> SEPT. 2017**

**TIME: 3 PM – 5 PM**

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#### **INSTRUCTIONS TO CANDIDATES**

Answer all Questions in section A and any other two (2) Questions in section B.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

**SECTION A = 30 MARKS (Compulsory)**

1. a) Differentiate between the following terms
  - i) Eluviation and Illuviation (2 Marks)
  - ii) Pedogenic and Endogenic (2 Marks)
  - iii) H Horizon and O Horizon (2 Marks)
  - iv) Endosaturation and Episaturation (2 Marks)
  - v) Effective base saturation and Base saturation (2 Marks)
  
- b) Describe the importance of soil in general (12 Marks)
  
- c) Describe the soil temperature regimes (8 Marks)

**SECTION B = 40 MARKS (Attempt any two Questions in this section)**

2. a) How would you define soil to a pastoralist (2 Marks)
- b) Describe the branches of soil science (12 Marks)
- c) Discuss the sections of Kenyan economy that depends on soil (6 Marks)
  
3. a) Describe the Duripan Horizon (10 Marks)
- b) Describe the current trends of soil classification (10 Marks)
  
4. Discuss different approaches to soil classification (20 Marks)