



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR

SECOND YEAR 1ST SEMESTER
MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE BIORESOURCE
MANAGEMENT AND CONSERVATION**

COURSE CODE: SBC 212

COURSE TITLE: INTRODUCTION TO SOIL SCIENCE

DATE: 8TH JANUARY 2018

TIME: 9 – 11 AM

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and ANY other TWO Questions.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

1. a) Define soil from a Soil Scientist point of view (2 Marks)
 - b) Differentiate between Hygroscopic and Gravitational water (4 Marks)
 - c) Explain why Soil air is different from the Atmospheric air (4 Marks)
 - d) Describe the following soil Horizons
 - i) Bk (2 Marks)
 - ii) Ab (2 Marks)
 - iii) Bs (2 Marks)
 - e) Describe the chemical composition of Igneous rocks (6 Marks)
 - f) Describe factors that affect Soil pH (8 Marks)
2. Describe the Pedogenic Processes involved in soil formation (20 Marks)
3. Discuss various parameters used to assess the suitability of land for maize cultivation (20 Marks)
4. Briefly explain the USDA Soil Taxonomy system of Soil Classification (20 Marks)