



(Knowledge for Development)

## KIBABII UNIVERSITY

## UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR

## SECOND YEAR 1ST SEMESTER SPECIAL/SUPPLIMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE BIORESOURCE MANAGEMENT AND CONSERVATION

COURSE CODE:

**SBC 212** 

COURSE TITLE:

INTRODUCTION TO SOIL SCIENCE

DATE: 1ST OCTOBER 2018

TIME: 8 - 10 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 the following Soil science terms: i) Soil from a Mining Engineer point of view (2 Marks) ii) Soil texture (2 Marks) iii) Polypedon (2 Marks) iv) Petrogenesis (2 Marks) v) Soil horizon (2 Marks) b) Describe Hans Jenny Equation of Soil Formation (10 Mark) d) Differentiate between Hue and Chroma Soil Colors (4 Marks) e) Describe any THREE processes by which Sedimentary Rocks forms (6 Marks) 2. a) Describe how soil porosity can be altered (6 Marks) b) Discuss the importance of soil colloids (14 Marks) 3. Describe the problems caused by soil pH in crop production (20 Marks) 4. a) Define Soil Pedon (2 Marks) b) Differentiate between Top and Sub-soil (18 Marks)