



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR

FIRST YEAR 1ST SEMESTER MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE AND BIOTECHNOLOGY, BACHELOR OF SCIENCE IN AGRICULTURE ECONOMICS AND RESOURCE MANAGEMENT, BACHELOR OF SCIENCE AGRICULTURE EDUCATION AND EXTENSION & BACHELOR OF EDUCATION SCIENCE

COURSE CODE:

SAB 101

COURSE TITLE:

AGRICULTURAL BOTANY

DATE:

12TH JANUARY 2018

TIME: 2-4 PM

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

SECTION A – ANSWER ALL QUESTIONS

- Q1 (a) Briefly discuss TWO major functions of leaves (5 marks)
 - (b) Discuss the relevance of Agricultural Botany to Agricultural production (5 marks)
 - (c) Briefly explain FIVE factors that are responsible for the success of angiosperms on earth than other groups of plants (5 marks)
 - (d) State FIVE roots modified for mechanical or additional support. Give an example of a plant species in each case (5 marks)
 - (e) Explain the origin of maize (*Zea mays*) and give THREE reasons why the crop is a major staple food crop in sub-Saharan Africa (5 marks)
 - (f) Briefly describe FIVE factors that can increase or decrease the rate of photosynthesis in plants (5 marks)

SECTION B: ANSWER ANY TWO QUATIONS (20 Marks each)

- 1 (a) Discuss the importance of transpiration in plants. (10 marks)
 - (b) Discuss the effects of water stress on growth and fruit yield of tomatoes. (10 marks)
- 2 Describe any FIVE permanent tissues and their functions in a plant. (20 marks)
- 3 Describe step by step the process of light reaction in photosynthesis of plants (20 marks)