



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2021 / 2022 ACADEMIC YEAR

FIRST YEAR 1ST SEMESTER
MAIN EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE

COURSE CODE: ACR 111/SAB 101
COURSE TITLE: AGRICULTURAL BOTANY

DATE: 26TH JANUARY 2022 **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

QUESTION 1.

- a) Explain the importance of plants in an ecosystem (4marks)
- b) Outline THREE similarities and THREE differences between mitosis and meiosis in plants (6marks).
- c) Explain the functions of a plant cell (5marks)
- d) Explain five factors make angiosperms the most successful on earth than other plants. 5marks
- e) Discuss THREE major functions of leaves (3 marks)
- f) Explain THREE factors affecting transpiration in plants (3 marks)
- g) Differentiate between a plant and animal cell (4marks)

QUESTION 2

- a) Describe the general plant cell structure and functions of various parts(10marks)
- b) Discuss the economic importance of Fungi (10marks)

QUESTION 3

Write brief notes on the following plant families of agricultural significance (20 marks)

- (a) Fabaceae (b) Malvaceae (c) Brassicaceae (d) Solanaceae (e) Musaceae

QUESTION 4

- a) Describe FIVE permanent tissues and their functions in a plant (10 marks)
- b) Write an essay on the classification of angiosperms (10 marks)

QUESTION 5

- a) Discuss the mechanisms of water and salt absorption by plants (10marks)
- b) Leaves of many plants are modified to perform specialized functions. List FIVE leaf modifications and describe the functions of each modification (10 marks)