

Handwritten signature



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2019/2020 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE AND BACHELOR
OF AGRICULTURAL EDUCATION AND EXTENSION**

COURSE CODE: SBT 211
COURSE TITLE: PLANT TAXONOMY

DATE: Friday 5TH FEBRUARY, 2021. **TIME:** 11:00-1:00 P.M.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks , the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

QUESTION ONE

- a. Define the following terms
 - i. Plant systematics (1 Mark)
 - ii. Isotype (1 Mark)
 - iii. Synonym (1 Mark)
 - b. Explain the importance of studying plant systematics (3 Marks)
 - c. Provide the rationale for periodic remodelling of plant taxa (3 Marks)
 - d. Elucidate three areas where current plant systematic activities largely concentrate on (3 Marks)
 - e. Explain the concept of endemic taxa and how it occurs in nature (3 Marks)
 - f. Explain how you would determine the relationship between two plant groups using plant metabolites (3 Marks)
 - g. Why are flavonoids considered to be useful in plant taxonomy (3 Marks)
 - h. Outline the problems facing modern methods of plant systematics (3 Marks)
 - i. Using a cladogram illustrate how three taxa XYZ may be related in a redundant way (3 Marks)
 - j.
 - i. . What is the purpose of the international code of Nomenclature for Algae, Fungi and plants (2 Marks)
 - ii. . Provide the name ending to the following taxonomic ranks (1 Mark)
 - x. Class-
 - y. Division –
-
2. Discuss the extinct gymnosperm phyla (20 Marks)
 3. Describe the procedure of preparing a cladogram (20 Marks)
 4. Describe the distinguishing characteristics of LEGUMINOSAE, UMBELIFERAE and POACEAE plant families (20 Marks)
 5. Write an essay on the CHANGES brought to international code of nomenclature for Algae, Fungi and plants in 2010 (20 Marks)