

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
BOTA 241: TAXONOMY OF HIGHER PLANTS**

STREAMS:

TIME: 2 HOURS

DAY/DATE: THURSDAY 08/07/2021

11.30 A.M – 1.30 P.M

INSTRUCTIONS:

(i) Answer all questions in section A and any other two in section B

SECTION A: (30 Marks)

1. Define plant species concepts that are utilized in biosystematics. [5 marks]
2. State five disadvantages of common plant names. [5 marks]
3. Outline the components of a plant scientific name. [5 marks]
4. Identify endings of a genus name when commemorating a person. [5 marks]
5. Elaborate the general principles of the ICBN. [5 marks]
6. With the help of a diagram, explain how plant evolution has taken place over time. [5 marks]

SECTION B (40 MARKS)

7. (a) Discuss types of dichotomous key citing an example in each case. [10 marks]
(b) Discuss the basic rules for constructing and using a dichotomous key. [10 marks]
8. (a) Discuss plant classification systems citing an example in each case. [6 marks]
(b) Discuss the mechanisms of speciation. [14 marks]

9. (a) Discuss the information required during plant data collection in the field. [10 marks]

(b) Discuss distinguish characteristics of the following plant families:

(i) Euphorbiaceae [5 marks]

(ii) Fabaceae [5 marks]

