

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF BACHELOR OF SCIENCE IN
AGRICULTURAL EDUCATION

BOTA 241: TAXONOMY OF HIGHER PLANTS

STREAMS: BSC (BOTA)

TIME: 2 HOURS

DAY/DATE: FRIDAY 26/03/2021

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS: Answer ALL questions in section A and any TWO from section B

1. Define the taxon that ends with the following endings:
 - (a) -aceae [1 mark]
 - (b) -mae [1 mark]
 - (c) -ales [1 mark]
 - (d) -phyta [1 mark]
 - (e) -oideae [1 mark]
2. List ways in which common names are derived giving an example in each case [5 marks]
3. Outline the rules of writing a scientific name [5 marks]
4. Identify the endings of a genus name when commemorating a person [5 marks]
5. Describe the species concepts in biosystematics [5 marks]
6. Explain the general 'types' that are identified by the ICBN [5 marks]

SECTION B (40 MARKS)

7. Discuss distinguishing characteristics and economic importance of the following plant families:
 - (a) Euphorbiaceae – Castor family [10 marks]
 - (b) Fabaceae – Legume family [10 marks]

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8. (a) Define a botanical key and differentiate the two main types [10 marks]
(b) Discuss the basic rules of constructing and using a dichotomous key [10 marks]
9. (a) Discuss the record of data collection and field observations that should be written in a field notebook. [10 marks]
(b) Elaborate how plants are pressed during preservation of specimens [10 marks]
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