
CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE

BOTA 241: TAXONOMY OF HIGHER PLANTS

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 4/12/2019

2.30 P.M – 4.30 P.M

INSTRUCTIONS

Answer all the questions in section A and any two in section B

SECTION A: 30 MARKS

1. List five rules of constructing a dichotomous key. [5 marks]
2. Explain the process of evolution of the binomial system of nomenclature. [5 marks]
3. Describe the use of author citation in a scientific name. [5 marks]
4. Discuss the formation of genus when commemorating a person. [5 marks]
5. With the aid of a diagram, briefly discuss a cladogram. [5 marks]
6. Discuss the characters of pollen grains that are used in modern taxonomy. [5 Marks]

SECTION B (40 MARKS)

7. Discuss (i) distinguish characteristics and (ii) economic importance of the following plant families.
 - (a) Poaceae [10 marks]
 - (b) Fabaceae [10 marks]
 8. Discuss plant collection and herbarium techniques. [20 marks]
 9. Discuss the following:
 - (a) Classes of species concepts. [6 marks]
 - (b) Mechanisms of creation of a new species. [14 marks]
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