



(Knowledge for Development)

# KIBABII UNIVERSITY UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR

#### SECOND YEAR FIRST SEMESTER

#### SPECIAL/SUPPLEMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY, AGRICULTURAL EDUCATION AND EXTENSION, AND BACHELOR OF EDUCATION SCIENCE.

COURSE CODE:

SBT 211/211.

COURSE TITLE:

PLANT TAXONOMY/PLANT TAXONOMY

AND SYSTEMATICS.

**DATE: 25TH JULY 2022** 

TIME: 2.00 - 4.00 PM

#### 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.	With an example, distinguish between a synonym and a basionym	(3 Marks).	
b.	Define the following terms	(3 Marks).	
	i. Isotype		
	ii. Nomenclatural type		
	iii. Neotype.		
c.	Explain how taxa can be remodeled in taxonomy	(4 Marks).	
d.	Explain the naming of hybrid species	(4 Marks).	
e.	Explain the phases in plant systematics	(4 Marks).	
f.	What are the contributions of Theophrastus to modern day taxonomy		
		(4 Marks).	
g.	Distinguish the various forms of plant taxonomy	(3 Marks).	
h.	Illustrate using a cladogram how three taxa A, X and Z may be related in a no		
	redundant way.	(3 Marks).	
i.	Describe a typical flower of Fabaceae	(2 Marks).	

### **QUESTION TWO**

Discuss the key nomenclatural changes to the code of nomenclature at the 2012 Melbourne conference (20 Marks).

## **QUESTION THREE**

Describe the procedure of constructing a cladogram in taxonomy (20 Marks).

# **QUESTION FOUR**

Write an essay on floral formulae and their interpretation (20 Marks).

# **QUESTION FIVE**

Write an essay on plant taxonomic keys (20 Marks).