



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR

SECOND YEAR 1ST SEMESTER
SPECIAL/SUPPLEMENTARY EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY,
BACHELOR OF SCIENCE IN BIORESOURCE MANAGEMENT,
BACHELOR OF EDUCATION SCIENCE AND BACHELOR
AGRICULTURE EDUCATION AND EXTENSION**

COURSE CODE: SBT 211:

COURSE TITLE: PLANT TAXONOMY


DATE: 8th October, 2018

TIME: 8:00 – 10:00 a.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 1

- (a). What key points of the Englerian evolutionary principles were challenged by Randalian School? (3 Marks)
- (b). What are the contributions of Theophrastus to modern day taxonomy (4 marks)
- (c). Describe three changes brought to the ICBN (3 marks)
- (d). With a character example, explain how you would distinguish “character states” (5 marks)
- (e). Explain the problems encountered when using modern taxonomic methods (5 marks)
- (f). What is a type specimen? (2 marks)
- (g). Distinguish between phenetic, phylogenetic and artificial classification systems. (3 marks)
- (h). With illustrations distinguish between a “panicle”, “raceme” and “spike” (3 marks)
- i. Illustrate completely asymmetrical “comb” tree requiring six hierarchical levels (2 marks)

QUESTION 2

Discuss taxonometrics and phylogenetics as methods in taxonomy

(20 marks)

QUESTION 3

Write an essay on the procedure for constructing a diagnostic key

(20 marks)

QUESTION 4

Describe the procedure for preparing a herbarium specimen

(20 marks)

QUESTION 5

Discuss the extant gymnosperm phyla

(20 marks)