

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATION

**RESIT/SUPPLEMENTARY / SPECIAL EXAMINATIONS EXAMINATION FOR THE
AWARD OF DEGREE IN BACHELOR OF**

BOTA 312: PLANT GENETIC RESOURCE MANAGEMENT

STREAMS: DSC. BIO

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 5/5/2021

11.30 A.M - 1.30 P.M.

Instructions: Answer all questions in section A and any two in section B

QUESTION ONE (30 Marks)

Section A

1. Explain how a germplasm can be used to enhance an organism. (5 marks)
2. Define the following terms
 - a. Genetic stock (2 marks)
 - b. Landrace (2 marks)
 - c. Obsolete varieties (2 marks)
3. Describe the methods used in conservation of germplasm (4 marks)
4. Describe the levels in which genetic diversity occur in plants (6marks)
5. Explain how you can determine the genetic diversity of grevillea Robusta trees in Chuka (5 marks)
6. State four ways in which biotechnology influences germplasm conservation (4 marks)

Section B

7. Explain the methods and techniques for handling plant genetic resources (20 marks)
8. Describe the institutions involved in the management of plant genetic resources
(20 marks)
9. Discuss the importance of proper management of plant genetic resources (20 marks)

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