

CHUKA



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Knowledge is Wealth (*Sapientia divitia est*) Akili ni Mali
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BOTA 312 PLANT GENETIC RESOURCE MANAGEMENT

Instructions: Answer all questions in section A and any two in section B *Time: 2 hours*

1. Explain the importance of conservation of plant genetic resources (5 marks)
2. a. Explain the importance of DNA databases in conservation of plant genetic resources (5 marks)
b. Explain why the following materials would be considered as plant genetic resources (4 marks)
 - i. a dry tree leaf
 - ii. a potato tuber
3. a. Describes the methods of conservation of plant genetic resources (4 marks)
b. Explain the different types of diversity that are found in plant genetic resources (3 marks)
4. Explain the application of biotechnology in conservation of plant genetic resources (5marks)
5. a. Describe the roles of any three international institutions that are involved in conservation of plant genetic resources (2 marks)
b. Describe the gene pools in which wild and weedy relatives are classified (2marks)

Section B (40 marks) answer any two questions

6. Analyze the responsibilities of a germplasm curator in conserving and utilizing plant genetic resources (20 marks)
7. Discuss the types of plant genetic resources (20 marks)
8. a. Discuss how genetic diversity of plant genetic resources is determined. (10 marks)
b. Discuss the legal frameworks that facilitates sharing of plant genetic resources within the international community (10 marks)

