

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2020/2021**

**EXAMINATION FOR THE BACHELOR OF WATER AND ENVIRONMENTAL MANAGEMENT**

**ASE 2511: AGROFORESTRY AND WOODLAND MANAGEMENT**

**DATE: AUGUST 2021 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER THREE QUESTIONS**

**QUESTION ONE: 30 MARKS**

a. i. Outline the key features of an agroforestry sytem. (4 marks)

 ii. Differentiate between silvopastoral and agrosilvopastoral systems.

(2 marks)

b. i. Identify the factors that promote the success of seed propagation.

(3 marks)

 ii. Outline the criteria for nursery site selection. (3 marks)

c. i. Outline techniques used in dry land farming. (3 marks)

 ii. Name three tree species in agroforestry. (3 marks)

d. i. Outline factors that determine the length of rotation. (3 marks)

 ii. Describe methods used in stumpage valuation. (3 marks)

e. i. Outline pest management strategies. (3 marks)

 ii. Identify the impacts caused by diseases on trees. (3 marks)

**QUESTION TWO: 20 MARKS**

a. Discuss importance of agroforestry. (10 marks)

b. Describe various agrosilvicultural practices. (10 marks)

**QUESTION THREE: 20 MARKS**

Describe methods used in seed collection.

**QUESTION FOUR: 20 MARKS**

Giving specific examples, explain various types of forests.