

CHUKA



UNIVERSITY

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**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
NATURAL RESOURCES MANAGEMENT**

NARE 451: AGROFORESTRY

STREAMS: BSC NARE Y4S1

TIME: 2 HOURS

DAY/DATE: THURSDAY 19/12/2024

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS:

Answer **All** Questions in **SECTION A** and **any Two** in **SECTION B**.

Do not write anything on the Question paper.

SECTION A: 30 MARKS

1. Briefly define the following concepts as applied in agroforestry (5 marks)
 - a) Agroforestry
 - b) Competition
 - c) Coppicing
 - d) Biomass transfer
 - e) Sericulture
2. Discuss the need for Agroforestry as an alternative land use (6 marks)
3. Differentiate between homegardens and windbreaks. (4 marks)
4. State 6 factors to consider when choosing an Agroforestry tree species (6 marks)
5. Briefly outline the four features of an agroforestry system. (4 marks)
6. Identify and briefly describe the three major agroforestry systems. (3 marks)
7. Outline the benefits associated with plantation crops with pastures and animals.(2 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

8. (a) Discuss the contribution of agroforestry in livestock production in Kenya. (12 marks)
- (b) Discuss the functions of Agroforestry Systems in the world today (8 marks)
9. Discuss the importance of insects in agroforestry (20 marks)
10. (a) Discuss the role of agroforestry systems in improving soil fertility, biodiversity and conservation in Kenya. (10 marks)
- (b) Discuss the general negative effects of trees on soil (10 marks)
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