CHUKA   **UNIVERSITY**

SUPPLEMENTARY / SPECIAL EXAMINATIONS

**FOURTH YEAR EXAMINATION FOR THE AWARD OF
BACHELOR OF SCIENCE IN (NATURAL RESOURCE MANAGEMENT,
AGRICULTURE; ANIMAL SCIENCE AND BACHELOR OF EDUCATION
AGRICULTURE EDUCATION AND EXTENSION)**

NARE 453: AGROFORESTRY

STREAMS: BSC (NARE, AGR) AND BED (AGED)

TIME: 2 HOURS

DAY/DATE: THURSDAY   19/11/2020   **11.30 A.M - 1.30 P.M.**

INSTRUCTIONS:
- Answer all the questions in section A and any other TWO other questions in section B
- Do not write anything on the question paper

SECTION A: (30 MARKS)
1. (a). Briefly explain the meaning of following terms as applied in agroforestry practices
   i.   Productivity   (3 Marks
   ii. Home gardens   (3 Marks)
   iii. Alley cropping   (3 Marks)

   (b). Briefly discuss the role of agroforestry in improving soil fertility   (6 Marks)

   (c) Distinguish between pricking out and hardening off in tree nursery management
                                                               (6 Marks)

2.   Write short notes on the following.
i. Biomass transfer   (3 Marks)
   ii. Fodder banks   (3 Marks)
   iii. Allelopathy   (3 Marks)

SECTION B: (40 MARKS)

1. (a).Discuss the role of agroforestry in addressing climate change in Kenya   (10 Marks)

   (b).With relevant examples, discuss the various management techniques which are applied to agroforestry trees and shrubs in arid and semi-arid lands of Kenya.   (10 Marks)

2. (a). Discuss agroforestry as a land use system in developing countries   (20 Marks)
3. (a). Discuss the various criteria used in classifying agroforestry systems in the tropics
                                                                                               (8 marks)
   (b)Discuss the contribution of agroforestry in livestock production in Kenya   (12 Marks)

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