**CHUKA** 



## UNIVERSITY

#### UNIVERSITY EXAMINATIONS

# FOURTH YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE

**HORT 424: PLANT NURSERY MANAGEMENT** 

STREAMS: BSC (HORT) TIME: 2 HOURS

DAY/DATE: WEDNESDAY06/12/2017 8.30 A.M. – 10.30 A.M.

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION I AND ANY TWO IN QUESTION II

## **SECTION I (30 MARKS)**

- Q1. (a) Plants in flower sell better and are preferred by retailers. Advice Ndagani nursery operator on how they can induce their plants to develop flowers for their customer satisfaction. [4 marks]
  - (b) Briefly explain non-chemical fumigation methods that can be used in a nursery for sterilizing soil and growing media. [4 marks]
- Q2. Plant library is a collection and preservation of plants and specimens in different forms.

  Advice nursery operators on how they can create plant library. [6 marks]
- Q3. (a) Weru nursery operators observed a continuous drop in soil pH conditions. Advice them on the source of acidity in their nursery. [5 marks]
  - (b) Production nurseries, propagate plants and sell them to retail outlets, landscapers and government departments, or wholesale them to growing on nurseries. Explain the factors that can determine the success of a production nursery. [3 marks]
- Q4. Magana growers are planning to export nursery stocks to South Africa. Advice them on the process of choosing, treating and shipping stock. [8 marks]

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## **SECTION II (40 MARKS)**

- Q5. (a) Give an account of a cost-efficient nursery production that facilitates a profitable enterprise. [12 marks]
  - (b) Describe the criteria that nursery operators should use while selecting mother plants and rootstocks for use in propagation. [8 marks]
- Q6. (a) Explain on how nursery operators can conduct nursery stock inspection to identify challenges facing the plants. [10 marks]
  - (b) Describe the requirements that must be met by a plant container to facilitate optimal growth of seedlings. [10 marks]
- Q7. (a) Describe how existing nurseries can be revamped to maximize profitability. [8 marks]
  - (b) Ndagani propagators are planning to start a nursery withinMeruSouth Subcounty.

    Advice then on the considerations to make to be able to select sustainable nursery plants.

    [6 marks]
  - (c) Describe ways through which the nursery manager can keep the plants in peak condition after they are ready for sale before the market is ready to buy them.

[6 marks]

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