

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN HORTICULTURE

HORT 333: VEGETABLE CROPS

STREAMS: B.Sc (HORT) Y3S1

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 5/12/2018

8.30 A.M - 10.30 A.M.

INSTRUCTIONS:

- This examination has two sections A and B.
- The candidate should answer ALL Questions in Section A and any TWO Questions in Section B.
- The examination contributes 70 Marks to the final grade.

SECTION A: SHORT ANSWER QUESTION- ANSWER ALL QUESTIONS IN THIS  
SECTION - 30 MARKS

QUESTION ONE

- (a) Botanical classification of vegetable crops is important during the production of vegetable crops. Why? [5 Marks]
- (b) Which are the classes of vegetable crops and list 3 families and example of a vegetable crop in each family. [5 Marks]

QUESTION TWO

- (a) Soil quality and fertility management play a critical role to successful vegetable production. What are the characteristics of a good soil to grow vegetable crops? [5 Marks]
- (b) Vegetable plants are started either from seed or transplants. What is the difference between them? [5 Marks]

QUESTION THREE

- (a) What is integrated pest management (IPM) and what techniques are required for a successful IPM programme? [5 Marks]

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- (b) Why is weed management important in vegetable production and list the types of weed commonly found in vegetable gardens. [5 Marks]

**SECTION B: ANSWER ANY TWO QUESTIONS FROM THIS SECTION [40 MARKS]**

**QUESTION FOUR**

A vegetable farmer in Ndagani, Chuka has a plan to plant cabbage, green beans, carrot and egg plant (brinjal) in a rotation.

- (a) Identify the groups where the listed crops will be considered in a rotation. [5 Marks]
- (b) What are the ecological conditions for each of the vegetable crops? [5 Marks]
- (c) Why is crop rotation important in the growing of solanaceae vegetable crops? [5 Marks]
- (d) Briefly explain how different types of fertilizers affect growth and development of vegetable crops. [5 Marks]

**QUESTION FIVE**

- (a) Weeds are major pests in vegetable growing. What types of weeds are common in vegetable gardens? [5 Marks]
- (b) Describe the sustainable weed management approach in vegetable production. [5 Marks]
- (c) How does tillage influence weed population in vegetable gardens? [5 Marks]
- (d) Weeds are secondary hosts of other pests in vegetables. Briefly explain and provide examples. [5 Marks]

**QUESTION SIX**

Growing vegetable transplants and transplanting is extensively practiced in vegetable crops. With reference to commercial vegetable production;

- (a) Why are vegetable crops raised from transplants and what are the qualities of a good transplant? [5 Marks]
  - (b) Briefly explain the growing of determinate tomato transplants and the process of hardening off seedling. [5 Marks]
  - (c) Describe the stages of tomato ripening and harvesting for fresh local markets. [5 Marks]
  - (d) How are fresh vegetables preserved? Give examples of common method. [5 Marks]
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