

UGANDA MARTYRS



UNIVERSITY

**NGETTA CAMPUS
FACULTY OF AGRICULTURE**

DIPLOMA CROP PRODUCTION AND FARM MANAGEMENT YEAR TWO

DCPM2205: COMMERCIAL HORTICULTURE PRODUCTION

FINAL ASSESSMENT

ACADEMIC YEAR 2023/2024 SEMESTER ONE

DCPM II

DATE: 5th/DEC/2023

TIME ALLOWED:3 HOURS (2:00pm-5:00pm)

INSTRUCTIONS:

- *Attempt question **ONE** and any other three questions of choice*
 - *All questions carry equal marks*
 - *Start every question on a new page*
 - *Do not write anything on the question paper*
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Question one

Early and late blight are key fungal diseases devastating tomato production in Uganda. These biotic stresses have forced many farmers to halt venturing in large scale production of tomatoes and even those farmers who are struggling to make two ends meet in tomato production by applying all sorts of chemicals in the control of two fungal diseases have failed because of rapid spread of the diseases in the tomatoes growing areas.

- a) Basing on the knowledge you acquired in horticulture crop production kindly advise tomato farmers on the following

- i) Causative agents (Pathogens) of both early and late blight (4 marks)
- ii) two ways how the two pathogens can spread rapidly in the garden (4 marks)
- iii) What measures can farmers put in place to reduce the spread of the causative agents in tomato gardens (6 marks)
- iv) As it was clearly stated that farmers use different chemicals to control the key fungal diseases of tomatoes, explain three adverse effects caused by chemicals to the environment (6 marks).
- v) State two hybrid varieties of tomatoes grown by farmers in Uganda and explain two key attributes of each variety which makes farmers to grow them widely (5 marks).

Question two

You are invited at your sub-county for a farmers' Forum meeting whose main agenda is the spread of Passion fruit woodiness virus in passion fruits. As a technical person.

- a) Explain four (4) factors that influence the rate at which this disease spreads in an area (8 marks).
- b) Explain three signs of the disease (03 marks)
- c) Discuss four effective control measures of the disease that could have been adopted by the meeting (8mark).
- d) Discuss 3 agronomic practices of passion fruits(6marks).

Question three

- a) With reference to any fruit crop, explain five (5) important benefits of growing the named crop (15 marks)
- b) Explain four (4) principles and practices of growing the referred to in a) above (10 marks)

Question Four

- a) In Uganda, the growing of flowers and ornamental plants is gaining popularity. Explain ten (10) reasons why this venture is gaining popularity (20 marks).
- b) Explain two methods of propagating flowers (5 marks).

A watermelon farmer went to his garden after two weeks of fruiting and he discovered that eggs are oviposit in fruits, decomposition of fruits by invading secondary micro-organisms, young fruits became distorted and dropped among others.

- a) The farmer approached you to help him to identify the pest which has attached his garden (2 marks)
- b) Explain five methods a farmer may use to control the pest (10 marks)
- c) Discuss the different agronomic practices recommended in the growing of watermelon (13 marks)

Question five

- a) Differentiate vegetable rotation from intercropping (5 marks)
- b) Explain four (4) advantages of practicing vegetable rotation(10marks)
- c) Describe five (5) factors you will consider when designing a good vegetable rotation (10 marks).

Question six

- a) Classify the following vegetables commonly grown in Lango sub region according their families
 - i) Sukuma wiki (01 mark).
 - ii) Egg plants (01 mark)
 - iii) Watermelon (01 mark)
- b) As an expert in Horticulture, explain two sources of seeds and other planting material in for vegetable growing (4 marks)
- c) Explain three important benefits of growing vegetables on a mixed farm (6 marks)
- d) Describe how you will establish a nursery bed for passion fruits seedlings which will be transported and planted in Mukono district central Uganda (8 marks).
- e) Explain 2 methods of nursery bed preparation in vegetable growing (4marks).

Question seven

- a) Explain how the following climatic factors affects production of Mangoes in Uganda (25 marks)

i)Precipitation (3marks)

ii) Temperature (3marks)

iii) Atmospheric humidity (3marks)

iv)Solar radiation (3marks)

v)Wind velocity (3marks)

iv Atmospheric gases (3marks)

c)Suggest four (4) ways how mango farmers can increase the yield of mangoes of already established garden(7marks)

Question eight

Horticultural crops can be propagated by use of seeds and vegetative methods.

- a) Explain five (5) qualities of seeds as a propagating material (10 marks).
- b) How is layering more advantages than use of seeds (10 marks)
- c) Discuss the disadvantages of using vegetative parts for propagation of horticultural crops.

Merry Christmas and prosperous 2024