



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
MASTER OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION
FIRST SEMESTER 2023/2024
[JANUARY-APRIL, 2024]

HORT 710: ADVANCES IN VEGETABLES

STREAM: Y1 S1

TIME: 2 HOURS

DAY: WEDNESDAY, 9.00 A.M. – 11.00 A.M.

DATE: 29/05/2024

INSTRUCTIONS

- 1. Do not write anything on this question paper.***
- 2. Answer any THREE Questions.***

Q1. The concept of integrated pest management (IPM), is a sustainable strategy for managing pests. The interpretation of IPM also varies among those who develop, promote, or practice IPM strategies. Discuss. (20 marks)

Q2. Explain the concept of seed priming and discuss the physiological mechanisms underlying the positive effects of priming on seed germination and seedling establishment. (20 marks)

Q3. Recent research has explored the use of pheromones for mating disruption in pest management. Explain the underlying mechanisms of this technique and discuss its advantages and limitations compared to traditional insecticides. (20 Marks)

Q4. a). Critically evaluate the morphological traits linked to bitterness in spider plant. (10 Marks)

b). Discuss the different soil management techniques in organic farming, in terms of their effectiveness in enhancing soil health. (10 marks)

Q5. a). Discuss the integration of IPM in organic farming systems, highlighting recent advancements and challenges. (10 marks)

b). Explain how pre- and post-harvest factors can influence the post-harvest quality and shelf life of French beans. (10 marks)