



**KISII UNIVERSITY**  
**UNIVERSITY EXAMINATIONS**

**THIRD YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF**  
**BACHELOR OF SCIENCE IN AGRICULTURE**  
**SECOND SEMESTER, 2023/2024**  
**(JANUARY-APRIL, 2024)**

**HORT 333/331: VEGETABLE PRODUCTION**

**STREAM: Y3 S2**

**TIME: 2 HOURS**

**DAY: THURSDAY, 3:00 – 5:00 P.M.**

**DATE: 18/04/2024**

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**INSTRUCTIONS**

- 1. Do not write anything on this question paper.*
- 2. Attempt ALL questions in Section A and ANY TWO in Section B.*

**SECTION A. (30 MARKS)**

- Using appropriate examples **define and describe** a vegetable. (6 marks)
- Write short notes in the following:
  - Successional cropping (2 Marks)
  - Any 2 Anti-nutritional factors in vegetables (2 marks)
  - Crop rotation in vegetable production (4 marks)
  - Indirect planting (5 marks)
  - Kitchen gardening (1 mark)
  - The Quality indices for Haricot Verts. (4 marks)
  - Puffiness in tomatoes (1 mark)
- Outline the considerations in planning a vegetable farm.(5 marks)

**SECTION B (40 MARKS) ANSWER ANY TWO QUESTIONS.**

- Climate is a major factor of concern in site selection for growing a specific vegetable. In view of this **discuss** the effect of temperature on **lettuce, tomato, onion AND cabbage** production (20 marks)
- Describe the harvesting and post-harvest handling of onions. (10 marks)
  - Prepare a detailed write-up on the following disorders in potatoes.

- (i) . Black Heart (2 marks)
  - (ii) . Tuber Cracks (2 marks)
  - (iii). Secondary Growth (2 marks)
  - c). Guide a farmer on planting his/her sprouted potato tubers (4 marks)
7. a). Discuss pruning in tomato production (15 marks)
- b). Calculate the quantity of French bean seed for sowing one hectare area from the particulars given below:
- Spacing = 45 cm × 20 cm  
Germination percentage of seed = 70  
Purity percentage of seed = 90  
Test weight of seed sample = 250 g
- (5 marks)