

CHUKA



UNIVERSITY

## UNIVERSITY EXAMINATIONS

### FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN CROP PROTECTION

HORT 878: BIOTECHNOLOGY IN PEST MANAGEMENT

STREAMS: MSC HORTICULTURE Y1S2

TIME: 2 HOURS

DAY/DATE : WEDNESDAY 6 /10/ 2021

2.30 PM – 4.30 PM

---

#### INSTRUCTIONS TO CANDIDATES:

- Answer ALL Questions in Section A and any other Two in Section B.
- DO NOT WRITE ANYTHING on the question paper.

#### SECTION A (TOTAL 20 MARKS)

1. (a) Describe ecological resistance and how it protects plants from pests.[10 Marks]
- (b) Discuss the advantages of Host Plant Resistance as a component in IPM. [10 Marks]

#### SECTION B (TOTAL 40 MARKS)

2. Discuss the Mechanisms of Pest Resistance in plants. [20 Marks]
3. (a) Elaborate on the importance of genetic modification in plants. [10 Marks]
- (b) Discuss concerns arising from the use of GM in horticultural crops.[10 Marks]

4. (a) Write brief notes on durable resistance for diseases in plants. [10  
Marks]

(b) Discuss resistance produced through transformation in plants. [10  
Marks]

.....