

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN
HORTICULTURE**

HORT 850: ADVANCES IN PLANT PHYSIOLOGY

STREAMS: MSC HORTICULTURE Y1S1

TIME: 3 HOURS

**DAY/DATE: THURSDAY 07/10/2021
P.M.**

2.30 P.M – 5.30

INSTRUCTIONS:

- Answer ALL questions in Section A and any other TWO questions in Section B.

SECTION A (TOTAL 20 MARKS)

1. (a) Describe the practical use of photoperiodism in horticulture. (10 marks)
(b) Discuss the role of ABA in the induction and maintenance of dormancy in seeds. (10 marks)

SECTION B (TOTAL 40 MARKS)

2. Discuss the effect of temperature on growth of horticultural crops. (20 marks)
 3. (a) Elaborate on mechanisms of nutrient absorption by plants. (10 marks)
(b) Discuss field capacity and permanent wilting point in plants. (10 marks)
 4. (a) Discuss cyclic and non-cyclic photophosphorylation. (10 marks)
(b) Discuss the special adaptation of C4 plants and their leaf anatomy. (10 marks)
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