

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF HORTICULTURE

HORT 864: ADVANCES IN ORNAMENTAL PLANT PRODUCTION

STREAMS: Msc HORTICULTURE Y1S2

TIME:3 HOURS

DAY/DATE: THURSDAY 13/04/2023

11.30 A.M. –2.30 P.M.

INSTRUCTIONS

1. The paper contains section A and B
2. Answer all questions in section A and any two from section B
3. Marks for each question are indicated in parenthesis ()
4. Total marks = 60

SECTION A (20 MARKS)

1. Discuss the different flower initiation pathways (10 marks)
2. Describe the external factors that affect flower bud differentiation (10 marks)

SECTION B: (40 MARKS) ANSWER ANY TWO QUESTIONS

3. a) Plant photo-morphogenesis is dependent on the phytochrome system. Critic this statement (12 marks)
b) Discuss the environmental manipulation for production of indoors plants (8 marks)
4. a) Flowering in ornamental plants is controlled by both endogenous and environmental factors. Justify the statement (12 marks)
b) Discuss the factors that cause failure in seed germination and emergence of ornamental flowers (8 marks)
5. a) Illustrate and explain the anthocyanin biosynthesis pathway using a flow diagram (12 marks)
b) Discuss the factors that would affect the induction and biosynthesis of anthocyanin in ornamental plants (8 marks)