

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DIPLOMA IN HORTICULTURE

HORT 0111: PRINCIPLES AND PRACTICES OF HORTICULTURE

STREAMS: DIP.HORT

TIME: 2 HOURS

DAY/DATE: TUESDAY 06/03/2021

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS: Answer ALL questions in section A and any TWO in section B

SECTION A (40 MARKS)

QUESTION ONE

- (a) Briefly explain the main branches of horticulture [3 marks]
- (b) Explain any three functions of ethylene in plant growth and development [3 marks]
- (c) State any two policies that guide the horticultural sector in Kenya [2 marks]

QUESTION TWO

- (a) Explain briefly how the genetic factors influences plant growth and development [3 marks]
- (b) State any five (5) deficiency symptoms of calcium in plants [5 marks]
- (c) State any three effects of excessive nitrogen application in plants [3 marks]

QUESTION THREE

- (a) Describe the characteristics of perlite as a soil growth media [4 marks]
- (b) Explain how temperature influences plant growth and development [5 marks]
- (c) Explain any five characteristics of an effective growing media [3 marks]

QUESTION FOUR

- (a) Explain the different types of intercropping in a horticulture cropping system [4 marks]
- (b) Explain any five functions of cytokinin in plant growth and development [5 marks]

SECTION B: ANSWER ANY TWO QUESTIONS (30 MARKS)

QUESTION FIVE

- (a) With examples discuss the role of primary macro nutrients in plant growth [7 marks]
- (b) Discuss the factors that have led to the success of horticulture industry in Kenya [8 marks]

QUESTION SIX

- (a) Discuss any five growing media used in the horticulture industry. [8 marks]
- (b) Discuss the environmental differences within a greenhouse and plastic house [7 marks]

QUESTION SEVEN

- (a) Discuss any five plant growth structures used in growing horticultural crops [9 marks]
 - (b) Discuss the benefits of carrying out crop rotation when growing horticulture crops [6 marks]
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