

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS
EXAMINATION FOR THE AWARD OF
DIPLOMA IN HORTICULTURE

HORT 0222: PLANT PROPAGATION

STREAMS: DIP HORT (Y1S2)

TIME: 2 HOURS

DAY/DATE: TUESDAY 6 /07/ 2021

5.00 PM – 7.00 PM

INSTRUCTIONS:

- Answer All Questions in Section A and Any Two Questions in Section B
- Do not write on the question paper

SECTION A – (40 MARKS) : ANSWER ALL QUESTIONS

1.a) Giving crop examples, describe hypogeal germination and its main advantage. [4 Marks]

b) Explain the importance of treating planting media and describe the disadvantage of fumigation. [4 Marks]

c) Describe the use of plastic bags as propagation containers. [4 Marks]

2. Describe the sequence of events during seed germination. [6 Marks]

3. a) Describe vermiculite as a natural rock mineral propagation media. [7 Marks]

b) Explain any seven advantages of using seeds for propagation. [7 Marks]

Marks]

4.a) Describe plant tissue culture [2 Marks]

(b) Explain any six symptoms of incompatibility in grafting. [6

Marks]

SECTION B – (30 MARKS): ANSWER ANY TWO QUESTIONS

5.a) Explain the differences between a rootstock and interstock and outline the uses of an interstock. [4 Marks]

b) Describe layering and its advantages. [5

Marks]

c) Describe the three basic methods of establishing plants and state the disadvantages of each.

[6 Marks]

6.a) Describe the three artificial methods of softening seed coats to enhance germination.

[3 Marks]

b) Explain the differences between grafting and budding and any eight uses of these procedures. [12 Marks]

7.a) Explain the steps you would take when preparing a leaf but cutting and indicate the appropriate propagation structure to use. [5

Marks]

b) Discuss the use of the following plant parts for propagation purposes rhizome, tubers and suckers. [10

Marks]

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