

**CHUKA**



**UNIVERSITY**

**SUPPLEMENTARY / SPECIAL EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF BACHELOR OF SCIENCE  
DEGREE IN NATURAL RESOURCES MANAGEMENT**

**HORT 222– PLANT PROPAGATION**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 16/11/2020**

**2.30 P.M - 4.30 P.M.**

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**INSTRUCTIONS:**

**SECTION A – ANSWER ALL QUESTIONS (30 MARKS)**

1.
  - a) Describe any four disadvantages of sexual propagation. (4 Marks)
  - b) Describe the general steps followed in successfully taking a stem cutting from a mother plant. (4 Marks)
2.
  - a) Explain the five major requirements for a successful grafting union. (5 Marks)
  - b) Describe the two modes of plant propagation and specify their major difference. (5 Marks)
3. Explain any 5 reasons for using vegetative propagation. (5 Marks)
4. Explain pasteurization as a media fumigation method. (7 Marks)

**SECTION B – ANSWER ANY TWO QUESTIONS (40 MARKS)**

5.
  - a) Explain any four advantages of using sand as propagation media. (4 Marks)
  - b) Describe any eight characteristics of a good media for crop propagation. (16 Marks)

6. a) Describe chemical dormancy in seeds and how it can be broken. (7 Marks)

c) Discuss the four major factors that determine propagation success when using cutting. (13 Marks)

7. a) Describe five disadvantages of using grafting and budding as propagation methods. (10 Marks)

b) Describe the five major requirements for a successful grafting union. (10 Marks)

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