



1st SEMESTER 2020/2021

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UNIVERSITY OF ESWATINI

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE YEAR IV

COURSE CODE: HRT405

TITLE OF PAPER: GREENHOUSE MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

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Question 1

Discuss in detail the factors to consider when siting/locating a greenhouse structure in a given location (Luyengo Campus Farm Site).

[25 marks]

Question 2

A. Outline the criteria to be considered when choosing glazing (covering) material of a greenhouse. **[12]**

B. What are the advantages and disadvantages of plastic tunnel crop production in Eswatini? **[13]**

[25 marks]

Question 3

Imagine you get hired after graduation to be Operations Manager at Vickery Greenhouse Enterprises at Malkerns. Describe the key maintenance operations you would perform in your greenhouse units.

[25 marks]

Question 4

Explain how the fogging system provides cooling in a greenhouse and further mention its advantages and disadvantages.

[25 marks]

Question 5

A. What are the factors to consider when fertilizing plants in a greenhouse? **[15]**

B. Using the Flow Method, calculate the fertilizer injector ratio to be used in applying 15:4:15 Omnia water soluble fertilizer. Assume you have stock solution of 200 ml with 16 litres of fertilizer water calibration bucket. The calibrated measuring cylinder showed 118 ml of left stock solution fertilizer to fill the 16 litre calibration bucket. **[10]**

[25 marks]