

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF SCIENCE IN HORTICULTURE

HORT 323: INTRODUCTION TO GREENHOUSE MANAGEMENT

STREAMS: BSC (HORT)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 15/04/2020

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS:

- The paper has **TWO** sections A and B
- Section A accounts for **30** marks while section B accounts for **40** marks
- Section A is compulsory
- Answer any two questions in section B

SECTION A (30 MARKS) – ANSWER ALL QUESTIONS

1. (a) Define the term greenhouse [2 marks]
(b) Describe factors to consider in site selection of a greenhouse [6 marks]
2. Explain briefly the following aspects as used in greenhouse production
(a) Greenhouse effect [6 marks]
(b) CO₂ enrichment [6 marks]
3. Describe classification of greenhouses according to cladding material [6 marks]
4. Describe properties of a polyfilm [4 marks]

SECTION B (40 MARKS) – ANSWER TWO QUESTIONS

5. (a) Discuss temperature control in greenhouse environment [8 marks]
(b) Discuss cultural and plant factors influencing plant growth [12 marks]
6. (a) Discuss the following growing media as used in greenhouse crop production
(i) Vermiculite [4 marks]
(ii) Perlite [4 marks]
(iii) Pumice [4 marks]

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- (b) Discuss insect growth regulators in control of greenhouse insect pests [6 marks]
7. (a) Discuss damping off of seedlings under the following subheadings:
- (i) Causal agent [3 marks]
 - (ii) Symptoms [4 marks]
 - (iii) Control [5 marks]
- (b) Discuss mechanisms of biological control of plant pathogens [8 marks]
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