

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:

TIME:2 HOURS

DAY/DATE: THURSDAY 13/04/2023

8.30 A.M. –10.30 A.M.

Instructions

- 1. This paper has two sections A and B**
- 2. Section A accounts for 30 marks while Section B accounts for 40 marks**
- 3. Section A is compulsory**
- 4. Answer any two questions in Section B**

SECTION A

1. a. Define the term green house (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. CO_2 enrichment (6 marks)
3. Describe classification of greenhouses according to cladding material (6 marks)
4. Describe properties of a polyfilm (4 marks)

SECTION B

5. a. Discuss temperature control in greenhouse environment (8 marks)
 - b) Discuss irrigation water quality for greenhouse crop production (12 marks)
6. a. Discuss the following growing Medias as used in greenhouse crop production
 - a. Vermiculite (5 marks)
 - b. Perlite (5 marks)

- c. Pumice (4 marks)
 - b. Discuss insect growth regulations in control of greenhouse insect pests (6 marks)
 - 7. a. Discuss damping off of seedlings under the following subheadings
 - a. Causal agent (3 marks)
 - b. Symptoms (4 marks)
 - c. Control (5 marks)
 - b. Discuss mechanisms of biological control of plant pathogens (8 marks)
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