

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2020/2021**

**THIRD YEAR SUPPLEMENTARY/SPECIAL EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE AND FOOD SECURITY**

**AHS 2310: FLORICULTURE II**

**DATE: MARCH 2021 TIME: 2 HOURS**

INSTRUCTIONS: ANSWER ALL QUESTION IN **SECTION A** (COMPULSORY) AND ANY OTHER TWO QUESTIONS IN **SECTION B**

**SECTION A: 30 MARKS**

QUESTION ONE

a. STS is an abbreviation of a common post-harvest substance;

 i. What is STS in full. (2 marks)

 ii. What is the role of STS in post harvest solution. (2 marks)

 iii. Briefly explain how the used STS solution is disposed off. (4 marks)

b. “OPENNING ROOM” is a facility used in post-harvest handling of Gypsophilla, briefly explain what it is, its importance mentioning conditions therein.(6 marks)

c. Give and explain six economic benefits of cut flower industry in Kenya.

(6 marks)

d. Taking and example of Kenya, what difference will it make, production-wise, by growing a particular rose variety in two regions, one in Kajiado and another in Molo. (4 marks)

e. HCD, formerly called HCDA, is a familiar acronym in the cut flower industry here in Kenya, what does it mean. (2 marks)

f. Differentiate between a Standard carnation and Spray carnation. (2 marks)

g. A flower sleeve is described as 50x25x15, what does this mean? (2 marks)

**SECTION B**

QUESTION TWO: 20 MARKS

Of the following three crops, select one and give detailed description/explanation giving examples where necessary.

Solidago; Chrysanthemums; Leather Ferns.

Under Categories

a. Commercial varieties (Name two and the breeders names) (2 marks)

b. Growling conditions. (2 marks)

c. Husbandry Practices. (4 marks)

d. Two diseases and their control. (4 marks)

e. Two pests and their control. (4 marks)

f. harvesting, cut stage, and post-harvest handling. (4 marks)

QUESTION THREE: 20 MARKS

Of the following three crops, pick one and give detailed description/explanation giving examples where necessary

i. Alstroemeria

ii. Carnation

iii. Gypsophilla

a. Commercial varieties (Names two and the breeders names) (2 marks)

b. Growing conditions. (2 marks)

c. Husbandry practices. (4 marks)

d. Diseases and their control. (4 marks)

e. Pest and their control. (4 marks)

f. Harvesting, cut stage, and post-harvest handling. (4 marks)

QUESTION FOUR: 20 MARKS

Roses are known to be propagated vegetatively. One of the commonly used form is grafting system known as Stenting;

a. Briefly explain why commercial Roses must be grafted. (5 marks)

b. Describe the stenting grafting procedure step by step involving both the rootstock and scion. (6 marks)

c. Some rootstocks are known to positively enhance the colours of the flowers, name one that is:-

i. Recommended for Bi-colours. (1 mark)

ii. Recommended for white colour. (1 mark)

d. Roses for a direct market wants relatively thinner stems in their bouquet, what rootstock variety would you recommend? (1 mark)

e. What relative humidity would you keep in propagation unit with three weeks’ old grafted rose materials? (1 marks)

f. Natal Briar is one of the rootstock common in Kenya, give a description and its advantages. (5 marks)