



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

FOURTH YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE WITH INFORMATION TECHNOLOGY

MAIN CAMPUS

AHC 402: FLORICULTURE II

Date: 10th December, 2016

Time: 3.30 - 6.30 pm

INSTRUCTIONS:

- Answer ALL questions in SECTION A and any other TWO questions from SECTION B.



MASEN OUNIVERSIRTY

UNIVERSITY EXAMINATIONS 2016/2017

FOURTH YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE WITH
IT

AHC 402: FLORICULTURE II

Instructions:

- The paper has two sections (A & B)
- Attempt **ALL** questions in section A and any two (2) in section B
- Number of candidates 55

Section A (50 marks)

Q1.

In International trade in cut flowers:

- a) Identify two countries that fall in the following categories of producers/buyers:
 - i) Has a small home market and largely produces for export.
 - ii) Largely produces for own market. **(1 mark each)**
- b) Outline:
 - i) The two most commonly traded flowers. **(1 mark)**
 - ii) The major reasons why people buy flowers. **(3 marks)**
 - iii) The significance of 'transport efficiency and reliability of air connections' to producers located far away from their main markets like Kenya. **(4 marks)**
- c) Critically comment on the following observations/statements:
 - i) Netherlands is both the world leading importer and exporter of cut flowers. **(2 marks)**
 - ii) The role of governments (of importing countries) on the cut flower industry of the exporting countries. **(4 marks)**
 - iii) Other than physically good quality flowers, exporters of cut flowers also need good reputation. **(4 marks)**

Q2.

- a)
 - (i) Define toning of carnation crop plants. **(2 marks)**

- (ii) Highlight the use of nitrogenous fertilizer in toning carnations. (2 marks)
- b) What is the significance of pinching standard carnations? (2 marks)
- c) Distinguish between the following:
 - (i) Double pinch and a pinch and a half of carnations crops. (2 marks)
 - (ii) Disbudding flower buds for producing standard carnations and for producing spray carnation. (2 marks)

Q3.

- a) What is the role of the 'time to next main market' on deciding the position of the cut when harvesting cut rose (2 marks)
- b) Explain:
 - (i) The first bending of grafted cut rose plants. (4 marks)
 - (ii) Why sugar containing preservatives should **not** be used in cut roses at the packhouse (pre-sale) stages. (4 marks)

Q4.

- a) Chrysanthemums are susceptible to several soil borne pathogens. Explain the 'ammonia toxicity' problem following steam pasteurization of media to control such soil pests. (3 marks)
- b) Why should **only two (2)** leaves be left behind on the harvested cane of stock plants when obtaining cuttings? (3 marks)
- c) Highlight the classification of chrysanthemum on the basis of commercial use (ways in which the crop is grown). (4 marks)

Section B (20 marks)

Attempt any two (2) questions from this section.

Q5.

- a) Explain the use of high greenhouse temperatures to accelerate bud break following harvesting of cut rose (*Rosa hybrida*). (3 marks)
- b) Pests not only reduce yields of cut flowers but also lower their appeal and hence quality. Using the case of cut rose (*Rosa hybrida*), discuss the components/tenets of a good pest management programme. (7 marks)

Q6.

- a) Why are chrysanthemum cuttings (for propagation) taken with premature flower buds almost worthless? (4 marks)

