



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411

Fax: 064-30321

Website: www.must.ac.ke Email: info@must.ac.ke

University Examinations 2012/2013

THIRD YEAR, FIRST SEMSTER, EXAMINATIONS FOR DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE

AHS 2302: OLERICULTURE 1

DATE: AUGUST 2013

TIME: 2 HOURS

INSTRUCTIONS: Answer questions *one* and any other *two* questions

QUESTION ONE – (30 MARKS)

- a) Describe two vegetable production systems that you consider key for commercial agriculture in Kenya (6 Marks)
- b) Present two types of classifications of vegetable crops that have practical implication on the production (4 Marks)
- c) Outline the role of vegetable crops in nutrition and human health (5 Marks)
- d) The glucosinolate content of brassicas has given them a special place in human health. Explain. (5 Marks)
- e) Discuss the physiological disorders of cauliflower (5 Marks)
- f) Which are the key vegetable crops in the following families: Chenopodiaceae, and umbelliferae (5 Marks)

QUESTION TWO (20 MARKS)

- a) Describe how the following practices are done during cabbage (*Brassica oleracea var acephaloo*) production.:
 - i. Land preparation and planting (5 Marks)
 - ii. Nitrogen supply (5 Marks)
 - iii. Harvesting and post harvest handling (5 Marks)
- b) What is the influence of temperature on flowering of cole crops? (5 Marks)

QUESTION THREE (20 MARKS)

Discuss the production of French bean (*Phaseolus vulgaris*) with emphasis on:

- a) Climate and soil requirements (10 Marks)
- b) Harvesting and post harvest handling (10 Marks)

QUESTION FOUR (20 MARKS)

- a) Compare the production and utilization of leafy vegetable and root vegetable (8Marks)
- b) How does the production of white asparagus (*Asparagus officinalis*) differ from that of green asparagus? (6 Marks)
- c) c) What challenges face production of African traditional vegetables? (6 Marks)

QUESTION FIVE (20 MARKS)

- a) Outline the steps that can be followed in organic vegetable production (8Marks)
- b) Discuss the agronomics factors that can influence production of herbs and spices (6Marks)
- c) Farmers prefer head lettuce compared to leafy lettuce. Explain. (6 Marks)