



2ND SEM. 2013/2014

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE
YEAR IV**

COURSE CODE: HORT 406

TITLE OF PAPER: SEED SCIENCE AND TECHNOLOGY

TIME ALLOWED: TWO [2] HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

**DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE
INVIGILATOR**

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

QUESTION 1

- a) What is the function of seed legislation? (7 marks)
- b) Outline the objectives of the SADC Seed Security Network (SSSN) (6 marks)
- c) List the general requirements for seed labelling (12 marks)

[25 marks]

QUESTION 2

Describe the following components of seed quality:

- a) Rapid tetrazolium seed viability (6 marks)
- b) Seed vigour tests (9 marks)
- c) Common problems with seed quality (10 marks)

[25 marks]

QUESTION 3

- a) Describe the general aspects of a community based seed production training programme. (9 marks)
- b) Describe the requirements for the recognition of a 'variety'. (16 marks)

[25 marks]

QUESTION 4

- a) Describe the **seven** seed classes according to the Seed Quality Control Services (SQCS) in Malkerns, Swaziland (14 marks)
- b) Write notes on traditional vegetable seed production (11 marks)

[25 marks]

QUESTION 5

Write notes on the following:

- a) Self-fertilization in vegetable crops (8 marks)
- b) Genetic emasculation (5 marks)
- c) Mechanical emasculation (6 marks)
- d) Chemical emasculation (6 marks)

[25 marks]