



1ST SEM. 2008/2009

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE
YEAR 4**

COURSE CODE: HORT 406

TITLE OF PAPER: SEED SCIENCE AND TECHNOLOGY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

Question 1

Discuss various ways of emasculation used in hybrid seed production. Give appropriate examples.

[25 marks]

Question 2

Discuss with the aid of examples how the following environmental factors affect seed production.

- a) temperature [12 marks]
- b) mineral nutrition [13 marks]

[25 marks]

Question 3

- a) Draw and label the structure of:
 - i) *Zea mays* kernel [10 marks]
 - ii) *Beta vulgaris* seed [10 marks]
- b) Describe factors that influence germination of seeds [5marks]

[25 marks]

Question 4

Describe seed production in vegetables.

[25 marks]

Question 5

Discuss, giving local and Southern African Development Community (SADC) examples:

- (i) Seed marketing [12 marks]
- (ii) Seed legislation and law enforcement [13 marks]

[25 marks]