



**1<sup>ST</sup> SESTER 2007/2008**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION**

**PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY YEAR 3 (NEW)  
HORTICULTURE YEAR 3 (NEW)**

**COURSE CODE: CP 301**

**TITLE OF PAPER: CROP BREEDING**

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS**

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THE CHIEF INVIGILATOR**

**QUESTION 1**

What were Reverend Thomas Malthus' postulates of 1798? Indicate whether his postulates were met or not. If they were not/met give a detailed account of why they were not/met.

**[25 marks]**

**QUESTION 2**

Give a historical account of the role which was played by plant introduction in the colonization of United State of America (USA).

**[25 marks]**

**QUESTION 3**

What role has modern plant breeding played in meeting the food and/or serviced the world population. In your view, do you think plant breeding will continue to play such a key role in meeting the food requirement of an ever-growing world population? And if not, what do think needs to be done to feed the ever-growing world population?

**[25 marks]**

**QUESTION 4**

Compare and contrast the pedigree and the bulk breeding methods. Your response should indicate in full details from making the initial crosses to final varietal release to commercial farmers.

**[25 marks]**

**QUESTION 5**

i) Write short notes of the contribution of the following scientist to:

- a) East (7)
- b) Johanssen (8)

ii) Distinguish the following terms

- a) Artificial and natural selection (5)
- b) Qualitative and quantitative traits (5)

**[25 marks]**