



2ND SEM. 2008/2009

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE
YEAR 2**

COURSE CODE: HORT 203

TITLE OF PAPER: FERTILIZER APPLICATION TECHNOLOGY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

Question 1

- (a) What do you understand by the term **fertilizer**? [5 marks]
(b) Discuss its importance in Agriculture. [20 marks]
[25 marks]

Question 2

- (a) State the criteria of essentiality of plant nutrients. [9 marks]
(b) Discuss the factors affecting fertilizer use and nutrient uptake by plants. [16 marks]
[25 marks]

Question 3

How would you prepare 200kg of 10-6-10 fertilizer mixture using sulphate of ammonia (21% N), single super phosphate (18% P_2O_5) and muriate of potash (60% K_2O)? Show all your calculations.
[25 marks]

Question 4

- Describe the **functions** and **deficiency** symptoms of :
- (a) Nitrogen [9 marks]
(b) Calcium [8 marks]
(c) Boron. [8 marks]
[25 marks]

Question 5

Discuss the various methods of fertilizer application.
[25 marks]