

2ND SEM 2010/2011

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UNIVERSITY OF SWAZILAND SUPPLEMENTARY EXAMINATION

PROGRAMME:

B.Sc. IN AGRONOMY 4

COURSE CODE:

CP 407

TITLE OF PAPER:

GRAIN LEGUME CROP PRODUCTION

TIME ALLOWED:

TWO (2) HOURS

INSTRUCTIONS:

ANSWER ANY FOUR (4) QUESTIONS.

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Question 1

Give a brief explanation of the following;

- (a) A grain legume crop (4)
- (b) Nitrogen fixation and its process (8)
- (c) Root nodule and its functions (5)
- (d) Rhizobium bacteria (4)
- (e) Parasitic weed (4)

Question 2

Give a production outline of *Pisum sativum* (peas) with emphasis on the adaptation, cropping method, plant spacing, weeding and harvesting. (25 marks)

Question 3

(a) What is the difference between pigeon peas and chickpeas?

- (10 marks)
- (b) Discuss the ecology of pigeon peas and indicate where it is best suited in Swaziland.

(12 marks)

(c) Give the botanical names of the crops in (a) above.

(3 marks)

Question 4

Name at-least three (3) grain legumes of economic importance in Swaziland. Outline why they are important to the nation and how their production can be improved. (25 marks)

Question 5

- (a) There are two oil producing grain legumes discussed in class. How are these legumes different from each other? (15 marks)
- (b) Name and describe the two branching habits of groundnut cultivars

(10 marks)