



2ND SEM 2011/2012

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UNIVERSITY OF SWAZILAND

FINAL 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)