



2nd SEMESTER 2016/2017

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UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY YEAR 1

COURSE CODE: CPR 102

TITLE OF PAPER: INTRODUCTION TO AGRONOMY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER QUESTIONS 1 AND 2, WHICH ARE
COMPULSORY AND ANY OTHER TWO QUESTIONS OF
YOUR CHOICE

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BY THE CHIEF INVIGILATOR**

QUESTION 1
(THIS IS A COMPULSORY QUESTION)

(a) Explain why seed is regarded as the most important input in crop production.
(14 Marks)

(b) Write an essay on how you would maintain soil fertility on a farm in the dry Middleveld of Swaziland.
(14 Marks)
[28 Marks]

QUESTION 2
(THIS IS ALSO A COMPULSORY QUESTION)

Write briefly on (a to g) the following. Give examples to illustrate your answers, where necessary. Each question carries four marks.

- (a) Seed health.
- (b) Seed yield components in beans.
- (c) General purpose classification of crops.
- (d) Major nutrients.
- (e) Methods of applying fertilizer to crops.
- (f) Strip intercropping system.
- (g) Factors that affect plant population in crop production.

[28 Marks]

QUESTION 3

What is conservation agriculture?

What are the three pillars of conservation agriculture?

(5 Marks.)

(6 Marks)

What are the advantages and the disadvantages of conservation agriculture?

(11 Marks)

[22 Marks]

QUESTION 4

Distinguish between the following pairs of words/terms. Use examples and/or diagrams to illustrate your answers where possible.

- (a) Additive and replacement method [series] in cropping systems (5 marks)
- (b) Effective and non-effective nodulation in beans. (5 marks).
- (c) Pure crop and other crop seeds in purity analysis. (4 marks)
- (d) Grain legume crops and pulses. (4 marks)
- (e) Complete and incomplete inorganic fertilisers. (4 Marks)

[22 Marks]

QUESTION 5

Compare and contrast organic and inorganic fertilizers.

[22 Marks]