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2ND SEMESTER 2017-2018

UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER

PROGRAMME:	B.Sc. AGRICULTURAL & BIOSYSTEMS ENGINEERING YEAR 2 B.Sc. AGRIC. ECON. & AgBMgt YEAR 2 B.Sc. AGRICULTURAL EDUCATION YEAR 2 B.Sc. AGRICULTURAL EXTENSION YEAR 2
COURSE CODE:	CPR210
TITLE OF PAPER:	FIELD CROPS
TIME ALLOWED:	TWO (2) HOURS
INSTRUCTIONS:	ANSWER QUESTION 1 AND 2 AND ANY OTHER TWO QUESTIONS

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COURSE CODE: CPR210 (M) 2017/2018

QUESTION 1 - COMPULSORY

Discuss the agronomic aspects of sorghum (*Sorghum bicolor* L.) production in Swaziland, under the following headings:

a) Tillage (5 marks)

b) Time of planting (5 marks)

c) Plant population on yield (5 marks)

d) Fertilizer response, water requirement and management (5 marks)

e) Crop sanitation – weed, pest and disease control (5 marks)

[25 Marks]

QUESTION 2 - COMPULSORY

a) Explain the tools a maize producer could use in both drier and high rainfall production regions to mitigate the incidence of drought stress during the period of pollination? (10 marks)

b) Explain how you would deal with the problem of stalk borer in maize. (5 marks)

c) Explain how you would deal with the problem of *Fusarium* cob rot in maize. (5 marks)

d) Discuss the ecological requirements for maize production (5 marks)

[25 Marks]

QUESTION 3

a) Discuss the factors that could influence the performance of any intercropping system. (15 marks)

a) What are the five most important aspects of successful intercropping? (10 marks)

[25 Marks]

QUESTION 4

Give at least five (5) reasons why recent studies indicate fluctuations and downward trend in groundnut production in Africa.

[25 Marks]

QUESTION 5

a) Give and briefly discuss the three (3) fundamental principles of conservation agriculture. (5 marks)

b) Explain the actions that could be taken by a farmer who has recently been introduced to conservation agriculture to sustainably increase his crop yields? (10 marks)

c) Outline the benefits to be realized from conservation agriculture.(10 marks)

[25 Marks]