



2ND SEMESTER 2017-2018

UNIVERSITY OF SWAZILAND

RESIT/SUPPLEMENTARY EXAMINATION PAPER

PROGRAMMES: BACHELOR OF SCIENCE IN AGRONOMY YEAR FOUR (4)

BACHELOR OF SCIENCE IN AGRONOMY YEAR TWO (2)

COURSE CODE: CPR208 & CP407

TITLE OF PAPER: SUGARCANE PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER QUESTION 1 AND 2 AND ANY OTHER TWO

QUESTIONS

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

84

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QUESTION 1 - COMPULSORY

In sugarcane breeding, preliminary evaluation of germplasm is carried out for desirable agronomic characteristics before it is included in the breeding program.

List and discuss the economic importance of each one of these agronomic characteristics.

[25 Marks]

QUESTION 2 - COMPULSORY

- a) Discuss the methods used to control weeds in sugarcane (10 marks)
- b) What are the factors that affect the effectiveness of chemical weed control in sugarcane? (5 marks)
- c) Outline the possible structure of a year round integrated weed management programme for sugarcane. (10 marks)

[25 Marks]

QUESTION 3

- a) Describe the meaning of maturity in sugarcane. (5 marks)
- b) Describe sucrose % cane and how it is measured. (5 marks)
- c) Describe brix % cane and how it is measured. (5 marks)
- d) Describe purity % cane and how it is measured. (5 marks)
- e) Explain the basis on which farmers are paid for their sugarcane (5 marks)

[25 Marks]

QUESTION 4

- a) Planting of sugarcane is carried out by a team of 15 people; describe in detail their different roles. (10 marks)
- b) Why is it important to soak the cutting tool in each of the buckets placed on either sides of the field being planted? (5 marks)
- c) Give a brief description of the symptoms of the disease being prevented. (10 marks)

[25 Marks]

QUESTION 5

- a) What are the advantages and disadvantages of not burning trash in post-harvest management of a sugarcane field? (15 marks)
- b) What are the advantages and disadvantages of not burning trash in post-harvest management of a sugarcane field? (10 marks)