



“Investing in Africa’s future”

COLLEGE OF SOCIAL SCIENCES THEOLOGY, HUMANITIES AND EDUCATION

ACP 203: PRINCIPLES OF CROP PRODUCTION

END OF SECOND SEMESTER EXAMINATIONS

NOVEMBER 2019

LECTURER: MR. TABARIRA J.

DURATION: 3 HRS

INSTRUCTIONS

Answer any **FOUR** questions

All questions carry equal marks (20).

DO NOT repeat material.

Write legibly.

Credit will be awarded for logical, systematic and neat presentations

Question 1

- a. Define organic farming. [2]
- b. Explain in detail, the four key principles of organic farming [12]
- c. Give the possible reasons why organic farming is not popular in most farming communities [6]

Question 2

- a. Discuss the perceived benefits of practicing crop rotation in crop production systems [12]
- b. Outline the importance of plant classification in crop production [8]

Question 3

Write explanatory notes on the following:

- a. Principles of conservation farming [16]
- b. Advantages of mixed cropping [4]

Question 4

- a. Demonstrate your understanding of **five** factors influencing the choice of plant spacing. [10]
- b. A maize seed lot has a germination percentage of 90%. Field losses before harvesting are estimated at 5%. Seed size of the cultivar is medium round giving 2000 seeds / kg. You have been instructed to plant one hectare using this seed lot at plant spacing of 75 cm by 30 cm.

Calculate:

- (i) Amount seed required at planting to achieve the target plant population at harvesting. [5]
- (ii) Amount of seed to plant in a 100 m row. [2]

- (iii) Total seed weight at planting to achieve the target plant population at harvesting [3]

Question 5

Write brief notes on the following:

- a. Tillage objectives [6]
- b. Factors affecting crop stand [6]
- c. Challenges of intercropping [8]

Question 6

- a. Define the following:
 - i. Tillage [1]
 - ii. Agriculture [1]
 - iii. Sequential cropping [1]
 - iv. Cropping system [1]
 - v. Plant population [1]
 - vi. Strip cropping [1]
- b. Discuss the importance of agriculture [8]
- c. Disadvantages of strip cropping [6]

End of Paper
