

"Investing in Africa's Future"

#### DEPARTMENT OF AGRICULTURE AND NATURAL SCIENCE

#### **ACP 307: FIELD CROP PRODUCTION**

#### **END OF FIRST SEMESTER EXAMINATIONS**

November/December 2019

LECTURER:

MTAITA TA

**DURATION:** 

**3 HOURS** 

## INSTRUCTIONS

- 1. Write your Registration Number[NOT YOUR NAME] on the answer sheet
- 2. Use Answer Sheets Provided To Answer Four Questions Only
- 3. Begin your answer for Each Question on a New Page
- 4. Credit is Given for Neat Presentation

#### NACP 307: FIELD CROP PRODUCTION

#### ANSWER FOUR QUESTIONS

#### **Question One**

- a) How will the knowledge of components of a legume help in understanding the yield potential of a leguminous crop? [5]
- b) You are asked to open a commercial farm in a given locality in the country of your own choice for growing field crops. Discuss in depth the criteria to be considered in selecting the field crop for the farm.

[20]

### **Question Two**

- a) Write briefly on the status of sweet production in your country and its future [8]
- b) What is your view that cassava is an important relief crop? [8]
- c) Discuss the role of grain legumes in a rural area of your own choice. [9]

# **Question Three**

- a) Why are the millets considered to be the most versatile of the cereal crops with respect to their adaptation to the environments of varying ecological conditions?
  [10]
- b) Discuss in depth the growth phases of a wheat plant [or any other cereal crop] and indicate the importance of the knowledge of these growth phases in cereal management. [15]

### **Question Four**

Discuss in detail the major challenges militating an increase in the production of field crops in a vast continent like Africa and suggest practical solutions to the constraints

[25]

#### **Question Five**

- a) Discuss the key considerations for successful wheat production. [5]
- b) If you were advising a potato or banana farmer to use improved planting material, what aspects of the husbandry of the crop would you recommend and why?

  [20]

### **Question six**

- a) Write about solid seeding in soybean with emphasis on advantages
   and disadvantages of the technology
- b) If you are advising a maize farmer to use improved maize seed, what aspects of the husbandry of the crop would you recommend and why? [10]

### Question 7.

- a) What is the reason for a longer turn round time in sugarcane production? [1]
- b) Discuss four factors which are usually considered when determining cane quality [8]
- c) Discuss eight factors affecting cane quality [16]