

S 2 TERM 2 HOLIDAY WORK

PRINCIPLES AND PRACTICES OF AGRICULTURE (THEORY)

SECTION A

SOIL SCIENCE

Item 1

Mr. Rutash would like to establish a coffee crop plantation on his 4 acres of land. Coffee grows well in slightly acidic soils. He would also like his neighbours to carry out coffee growing because of the high market demand it has but they have small pieces of land. Him and the neighbours occupy a gentle sloping area that has rills. The soils are brownish on the gentle sloping area where the rills were created. The lower part of his land keeps a lot of water throughout. A good number of dead soil organisms are observed on top of stagnant water. A long side the slope, some are more compacted with widen cracks. When he picked a soil sample from his land to the research center for analysis, the results showed a pH of 11 with less air percentage.

Task;

As a student of agriculture, advise Mr. Rutash on how to gain from his project.

SECTION B

Item 2

A poultry farmer keeps local chickens for commercial eggs production in Katumu village due to the high demand of eggs in Luweero town council. He keeps them on free range and most of them have been eaten by predators. They hardly take clean water on the farm. In the evening, he gives them plain maize bran on feed troughs that have moulds growing on them. Some of the eggs laid have soft egg shells and easily breakdown. Some hens break and drink the laid eggs. He treats his birds with ash and red pepper when they are sick. Some of the eggs are laid in the nearby bush where they cannot be easily traced according to his daily records.

Task;

Write a message advising the poultry farmer above to gain profitably from his project.

Item 3.

Musa established a bean growing project. He selected seeds for planting from what he harvested the previous season. Some seeds were small in size while others had wrinkled surfaces but bigger in size. He cultivated his land once using a tractor and dug planting holes of depth equivalent to 30cm following a spacing of 3cm by 3cm. He sowed four seeds in each planting hole.

After two weeks, the few plants that established and germinated exhibited yellowish leaves. Some bean plants were observed with dark sunken lesions on leaves/pods and simple holes on their stems. Upon maturity, he harvested beans after extreme dryness with some bean seeds scattered all over the garden. All in all, he had a poor season. He is willing to try again next season.

Task.

Advise him on how he can deal with the situation above to get the best results the following season.

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