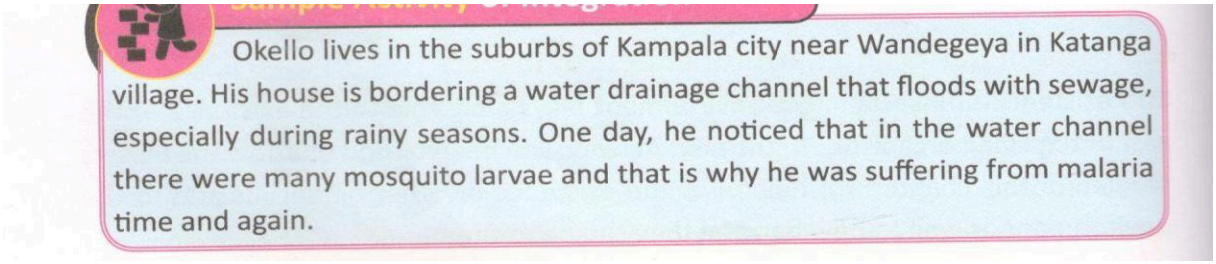
ENTEBBE BRIGHT SECONDARY SCHOOL

S.2 BIOLOGY ASSESMENT 1 2022 TERM 3

TIME: 1HR 30 MINS

ANSWER ALL QUESTIONS

QUESTION ONE.



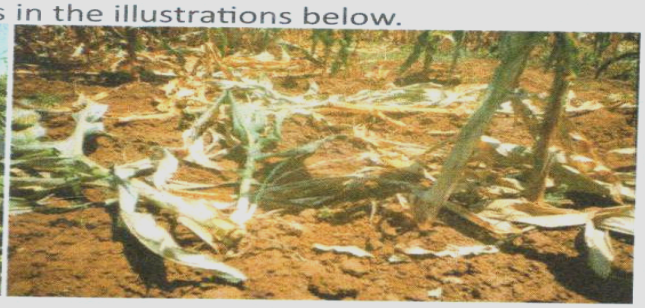
Okello lives in the suburbs of Kampala city near Wandegeya in Katanga village. His house is bordering a water drainage channel that floods with sewage, especially during rainy seasons. One day, he noticed that in the water channel there were many mosquito larvae and that is why he was suffering from malaria time and again.

His neighbour, Mukasa, had also created a rubbish pit in front of his house besides the water channel where jack fruit and banana peels were dumped regularly. These attracted many houseflies that fed on rotting organic matter. The houseflies visited their houses and at times rested on their cold food that was left exposed which later would be eaten. During rainy seasons, his family members would experience diseases like malaria, dysentery and cholera occasionally.

Besides the water channel opposite his house, Okello had a maize garden there. As he was weeding his maize plants, he noticed that army worms (caterpillars) were destroying the shoots of his maize. He as well found out that some maize plants were being destroyed by termites from the nearby anthill. He became so disappointed and didn't know what to do next.

See the two destructions of maize plants in the illustrations below.





Task

a) As a student who has studied about insects, what advice can you give to Okello who lives in Katanga village to overcome the challenges is facing.

b) Using observable features, construct a dichotomous key to identify the insects disturbing Okello of Katanga village.

QUESTION 2

Growing ornamental plants

Byekwaso, a youth living in Rwebikona in Mbarara City, dropped out of school before completing Primary Seven due to lack of school fees. He was wondering what type of business he could start in order to earn a living.

His friend Bwengye proposed to him to start a business of growing ornamental plants at the bank of River Rwizi. He secured a place for him where he could grow his plants and gave him capital of 150,000 Uganda shillings to start with.

Byekwaso was very happy with his friend's idea and the support. However, he had no idea of how to start the business and the types of plants to stock that would have attractive features to his customers to buy so that they plant them in their compounds or use them for decorative purposes.

Task

As a biology student who has studied a topic about structures of flowering plants, write an article to Byekwaso that would enable him stock plants with attractive features to impress his customers to buy his ornamental plants.

Question 3

. Describe how you would carry out an experiment to determine the percentage of air in the soil.

b). give an advise to the farmer who faces a challenge of soil erosion while cultivating on a slope of a mountain.

END