Name………………………………………………………………..…………

School…………………………………………………………………………..

**553/1**

**BIOLOGY**

**PAPER 1**

**Nov/Dec 2024**

2 hours

**SESEMAT – MBARARA REGION**

**END OF YEAR ASSESSMENT 2024**

**Uganda Certificate of Education**

BIOLOGY

**Paper 1**

Theory

2 hours

**INSTRURCTIONS TO CANDIDATES:**

*This paper consists of* ***four*** *examination items. It has two sections;* ***A*** *and* ***B.***

*Attempt all items*

**Item 1**

James planted tomatoes on a well-watered fertile plot along a newly constructed murrum road. The dust from the road spreads and covers the plants’ shoot surfaces. James is afraid of low yields due to the effect of dust on plants life.

1. Identify the plants organs that were affected by the dust ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………
2. Explain why yields may be low. ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………
3. Explain what the learners should do in order to have better yields in subsequent seasons. ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**Item 2**

Sam, a curious farmer, practices mixed farming on his four-acre piece of land. He focuses on cultivating flowering plants and raising rabbits. This decision came after his children were diagnosed with kwashiorkor and scurvy.

**Task**

1. What characteristics do the two groups of organisms share in common? ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………
2. Explain how the harvest from Sam's farm could help his children recover from the health conditions mentioned above. ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..…………………………….
3. How do the rabbits benefit from the other organisms on Sam's farm? ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**Item 3**

On arriving home from university, Sembera found his cassava plants attacked by an unknown disease. Plant **A** was obtained from Sembera’s garden and provided to you for analysis.

**Task**

1. Identify the structures which were affected by the disease. Give reasons ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………
2. How does the appearance of plant **A** affect its life processes? …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..………………………………………………………………….
3. Draw one infected leaf of specimen **A.**

**SECTION B**

**Item 4**

Matama, a pregnant mother of blood group **O**, visited a clinic for antenatal check up. Her medical report revealed that she was “anaemic.” The clinic had blood of all blood groups except **O**. Thus, Matama was referred to the nearby hospital but she went complaining that she was not helped.

**Task.**

Help Matama to understand her medical report, the likely cause of her medical condition and why she was referred yet there was blood at the clinic. What should Matama do to prevent the reoccurrence of such a condition in her life?

END