



ST. PETERS HIGH SCHOOL -BUSABALA

COMPETENCE BASED ASSESSMENT

PRE-MOCK EXAMINATION 2025

S.4 BIOLOGY PAPER 1

TIME: 2 ½ HOURS

NAME..... SIGN.....

INSTRUCTIONS TO CANDIDATES

- ✓ This paper consist of two items A and B
- ✓ Attempt all items in section A
- ✓ Section B has two parts, I and II
- ✓ Attempt 2 questions in each part.

Item 1

MR. Okello is a renowned farmer in Pallisa district and carries out subsistence farming. He recently acquired a piece of land on a hilly place near a dusty marram road. He prepared his garden well, applied fertilizers and later planted beans and maize. At the time of flowering, he observed that the upper surfaces of all the leaves were covered by dust, turned to dark green and the shoots of the bean plants had developed more flower

buds, and the area did not receive rain until the time of harvesting. Mr. Okello received very poor yields from his garden.

Task

- (a) State the processes in plants that were affected by the conditions in the area.

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- (b) Explain how the conditions in the area contributed to the very poor yields in Mr.Okello’s garden.

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- (c) How did some of the plants manage to give some yields despite the conditions?

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Item 2

Mr.Zedde, a 62 year old officer in a government agency retired from active duty two years ago and now spends much of his time seated at his retirement home. He however experiences persistent back pain, bone weakness, frequent urination and feeling thirsty all the time. He also has difficulty in hearing and has resorted to drinking alcohol much of his time.



Task

(a) Identify the health conditions affecting Mr.Zedde

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(b) Explain the causes of the health conditions affecting Mr.Zedde.

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(c) Advise Mr.Zedde on how to improve his health state for a better life in his retirement.

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Item 3

A 15-year old girl became pregnant and claimed that her boyfriend from the neighboring school was responsible for the pregnancy .She was expelled from school and her parents disowned her. She later started falling sick often, gave birth to a baby with extremely low birth weight, and during delivery her pelvis was damaged. The baby was also an albino. Her

boyfriend rejected the baby, claiming it was impossible for such a couple to have an albino child.

Task

- (a) Explain the dangers the girl and her boyfriend’s behavior caused to her.

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- (b) Show how the baby could have inherited the condition.

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- (c) Explain how the condition of the baby can be managed to avoid adverse effects.

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SECTION B

Part I(attempt one item)

Item 4

In 2019, there was an outbreak of famine in Teso-region , in response to this the government through the ministry of agriculture provided cassava cuttings to the residents to enable them to grow their own food, the residents cleared many shrubs and indigenous trees on their land in order to mass produce cassava which is their staple food. Many also used different insecticides to destroy ant hills to limit chances of termites destroying the cassava plants as well as applying fertilizers to boost the harvest. However, these actions have resulted into a number of environmental challenges.

Task

- (a) Explain to the residents the challenges they have caused to the environment as a result of their actions.

- (b) Why it was important for the residents to conserve their environment amidst the prevailing famine problem.

Item 5

Kigezi region is a renowned hilly place, however due to the increasing population of the citizens as the 2024 National census and need to improve livelihood among most residents in the area, many have started to practice human activities like cutting of trees for timber in the area and production of charcoal sold for money, farming and rearing of cattle in most areas previously occupied with vegetation. Those carrying out farming usually first burn the bushes in preparation for planting and dig up and down the hills which has resulted into a lot of negative impacts in the area like flooding of gardens in valley, mud slides and even strong winds.

Task

- (a) How the different human activities have caused the challenges in the area
- (b) How the above challenges can be overcome.

Part II (attempt one item)

Item 6

Turinayo has been smoking for the past 20 years, feeds on a lot of fatty foods and rarely brushes his teeth, recently he started experiencing complications such as tooth ache, difficulty breathing and trouble moving his limbs on one half of the body. Following a visit to a hospital, medical examination further revealed that Turinayo was diagnosed with high blood

pressure. Doctors advised him to change his lifestyle but has no idea how to do this.



Task

- (a) Explain how Mathias' lifestyle has affected the functioning of his body.
- (b) Advise Turinayo on how to manage his health condition.

Item 7

Kinene was involved in a car accident lost a lot of blood, sustained injuries and became unconscious so was rushed to a hospital where he was administered with a glucose solution, transfused with blood and other medications. After an hour, he regained consciousness and felt stronger and returned to normal state, however further ex-ray tests showed that

Kinene's lungs had been injured.



Task

- (a) Explain how the car accident affected the functioning of Kinene's body.
- (b) Describe how the doctor's intervention enabled Kinene return to normal state.

END

"The future belongs to those who believe in the beauty of their dreams."