

Name.....

Signature.....School.....

P553/1

BIOLOGY

Paper 1

July/August 2025

DIVINE COLLEGE WAKISO

END OF TERM TWO 2025

Uganda Certificate of Education

BIOLOGY

Paper 1

Theory

2 HOURS

INSTRUCTIONS TO CANDIDATES

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

*Section **A** has **three** compulsory items*

*Section **B** has two items; Answer **one** item from each part*

*Answer **four** items in all*

SECTION A

Answer all the items in the spaces provided

Item 1.

Herbalists in Nakwero village obtain plant structures for use in making herbal medicines by removing the barks of trees from the stem, pluck off leaves and dig out roots. This has greatly affected the number of some tree species in the area. The community members noticed that after some time, some trees had developed new roots, buds and barks

Tasks

a) Identify the plant processes affected by the actions of herbalists

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b) Explain how the actions of the herbalists affected the normal functioning of plants

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c) How did some trees manage to survive despite of the actions of the herbalists?

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Item 2

Anna, a teenager recently joined a peer group of boys around Kyoga streets, who smoke cigarettes, sniff petrol and consume alcohol. On Saturday evening when Anna was walking unsteadily back home from cinema hall after a heavy alcohol drinking, she encountered fierce looking dog barking loudly and running towards her. Her heart beat and breathing rate increased and the pupil of the eyes dilated. She managed to run away up to home despite struggling to maintain balance

Support material



Task

a) Explain how Anna's body coordinated to bring her reactions after encountering a fierce dog until she reached home

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b) Explain the likely effects of her lifestyle on her life

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c) Advise she to avoid challenges associated with her lifestyle

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Item 3

Mary, a P.6 pupil frequent urinates and feels hungry often especially after eating sweet things. Her grandmother has for long having bone pain making her even fail to walk upright while her father shows symptoms of swollen neck. These health challenges have left the family members stressed

Task

a) Identify the health challenges in each of the family members

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b) Explain the possible causes of the health challenges identified above

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c) Suggest possible management strategies to family members to manage the challenges to live a normal life

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SECTION B

Answer only one item on the answer booklets provided

Item 4

Mutesi is one of the famous athletes in Uganda who participated and represented the country in common wealth games in Russia. In one of the Olympics games before the competitions began, Mutesi took a meal rich in carbohydrates 30 mins to the race.

At the start of the race, she was observed splinting very fast but toward s the end, her speed reduced, heart beat and breathing rate increased and had a lot of muscular pain in his legs. After the race, she rested for 20mins and stood up to jubilate her success

Task

- a) Describe how the carbohydrates were metabolized in her body to enable her win the race
- b) Explain the challenges her body experienced towards the end of the race
- c) Explain how her body managed to overcome the challenges to enable her jubilate after the race

Item 5

The hygienist observed discored teeth, painful and bleeding gums, difficulty in breathing, general boggy weakness and coughing blood with mucus in Anita's friend, **Daniel** at her village. Her friend when admitted to the hospital revealed that he has been smoking for the recent 5 years. The doctor recommended Daniel to be put on oxygen machine to get oxygen for his life to save his life. This has left Anita stranded to lose his beloved friend

Task

- a) Explain how the symptoms affected the functioning of Daniel's body and possible causes of the challenges
- b) Describe how the oxygen from oxygen machine will reach into his blood to save his life
- c) Advise Daniel on the possible measures to avoid the above health challenges and live a normal life

END

WISH YOU SUCCESS SEMI CANDIDATES