**TEST ITEMS FOR CONFIDENTIAL BUILDING SEMINAR TO BE HELD ON 13Th-JULY-2024 AT SIRONKO HIGH SCHOOL**

**TEST ITEMS FOR ASSESSMENT BIOLOGY PAPER TWO/THREE (553/2/3)**

**PAPER 2**

***All items are compulsory***

**ITEM ONE**

A 3 year old child experiences delayed wound healing, enlarged belly, frequent sickness, and signs of anemia. Doctors revealed that the child’s diet should be changed and parents have been advised to supplement his diet with minerals too. He has been feeding on foods whose foods samples X and Y have been provided.

**Task**

Carry out scientific investigation on the food samples provided. Explain to the parents the cause of the sickness and suggest a suitable advice on how to improve the child’s health conditions (30Scores)

**ITEM TWO**

An outbreak of cholera has been registered in Kibira ward. The people in the village been advised by the village Health Team (VHT) to keep latrines clean. The chairperson has advised that spraying flies around homes is an alternative solution. The specimens A and B have been collected from the compound around one of the homes in the same village

***Task***

1. Classify the specimens into their phylum, and class using suitable characteristics (03Scores)
2. Explain the structural adaptations of the specimen responsible for the outbreak (06Scores)
3. Draw and label the hind limb of specimen B (09Scores)

**PAPER THREE**

**ITEM ONE**

Madam L. kennix is a vegetable and chips seller in Mpogo Trading Centre. She obtains Irish potatoes from Kapchorwa which she uses to obtain sliced chips. Sometimes she gets a surplus harvest of vegetables and Irish potatoes but they end up being destroyed even when she sprinkles water on them to keep them fresh. She has been advised to change the type of water source she uses. She has got 5 suppliers of water from different sources A,B,C,D and E but doesn’t know which best sources she should use to preserve the vegetables

Specimen T and samples of water from different sources have been presented to you.

***Task***

As a student of Biology, carry out a scientific investigation to provide an appropriate advice to Madam L. Kennix

**ITEM TWO**

Ms. Alice is a local farmer in Kibira ward. She weeds her maize garden regularly; however, she noticed that there are some two plants that keep appearing in the garden just a few weeks after weeding. She also observed that the neighbor’s goats usually move from the nearby bush and pass through her garden. Alice is still wondering why these plants keep appearing in her garden

***Task***

You are provided with specimen K and L, which are parts of the plants that keep growing in Alice’s garden.

1. Using observable features, identify the plant parts K and L (10Scores)
2. Explain to Alice how the plants keep appearing in her garden (10Scores)
3. Draw and label specimen K (10Scores)

**ITEM THREE**

Following the better performance in the last year’s UCE exams, your school admitted a large number of S.1 students this year. However, the school lacks enough desks in this class, so most of the students sit and bend for long hours while writing their notes. As a result, many studnts are experiencing severe backaches.

Specimens K1, K2, and K3 provided are bones obtained from the back region of the human skeleton

***Task***

Examine the specimens carefully and then;

1. Use biological principles to show how each specimen can be identified (10Scores)
2. Explain how each specimen is adapted to its function(s) (10Scores)
3. Draw and label;
4. Lateral view of K2 (05Scores)
5. Anterior view of K3 (05Marks)

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**CONFIDENTIAL INFORMATION FOR BIOLOGY PRACTICAL ITEMS**

**BIOLOGY PRACTICAL PAPER NUMBER ONE**

**ITEM ONE**

**X** is made by dissolving 5g of starch; in 100cm3 of distilled water at a temperature of 60ᵒc, 2g if glucose in 100cm3 of distilled water and the two solutions mixed

Y is made by mixing concentrated orange juice and concentrated Irish potatoes extracts

***Requirements***

* **Access to;**
* **Heat source**
* **Reagents of food tests**
* **5 test tubes**
* **Droppers**
* **Measuring cylinders (10ml capacity)**

**ITEM TWO**

**A** is a freshly killed sugar Aunt

**B** is a freshly killed housefly

**ASSESSMENT PRACTL PAPER NUMBER TWO**

**ITEM ONE**

Specimen T is fresh Irish potato

A,B,C,D and E are 25% sucrose solution, 5% sucrose solution, 15% sucrose solution, distilled water and 10% sucrose solution respectively.

***Requirements***

**Access to;**

* **Razor blade**
* **5 beakers**
* **Labels**
* **Test tubes**
* **Stop clock**

**ITEM TWO**

**K** is a rhizome (couch grass)

**L** is a stem vein of sweet potato

**ASSESSMENT PRACTICAL PAPER NUMBER 3**

**ITEM ONE**

**X** is clay soil

**Y** is sand soil

***Requirements***

**Access to;**

* **Measuring cylinders**
* **Cotton wool,**
* **Filter paper**
* **Filter funnel**
* **Stop clocks**

**ITEM TWO**

**K1** is cervical vertebra

**K2** is thoracic vertebra

**K3** is lumber vertebra

**END**