

Name.....Personal No.....

553/3

BIOLOGY

PAPER 3

2024

2 HOURS 30 MINUTES



SISEB MOCK EXAMINATION 2024

BIOLOGY PAPER 3

(PRACTICAL)

TIME: 2HOURS AND 30 MINUTES

Instructions to candidates:

- This paper consists of two items.
- Attempt both items
- Responses to items in this paper must be written in the spaces provided.
- All items in this paper carry equal marks.

ADVICE

- Read each item carefully before you start answering
- Spend part of the time planning for your investigation

FOR EXAMINER'S USE ONLY

ITEM	1	2	TOTAL
MAXIMUM SCORE			
ACTUAL SCORE			
INITIALS			

Item 1

People in Mbale city enjoy eating irish potatoes commonly known as chips.

Ms. Marie, one of the chips fryers in the city faces a problem of preserving Irish potatoes in case she gets a surplus supply of the fresh Irish potatoes.

To preserve the Irish potatoes, Ms. Marie has been advised to always immerse the Irish potatoes in salty water, but she doesn't know the right amount of salt to add in pure water.

Task

You are provided with specimen S and salt solutions M, N and O of varying concentrations;

Plan and design and an experiment to investigate which of the solutions M, N and O is most suitable for preserving the Irish potatoes

[illegible]

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Item 2

In Bubugo village, most residents plant trees such as Eucalyptus sp in their vacant gardens along the River. Towards the end of the dry season, Mr Mbulamaye one of the farmers in the area has observed a drastic decrease in the number of his tree plants. He has observed destruction of the barks of the trees which end up drying off. At the same time, there is a reported outbreak of diarrhea and dysentery in Mr. Mbulamaye's village due to poor disposal of human wastes in the area.

Specimen W, T, U and V are some of the specimens collected by Mbulamaye. They are suspected to be the cause of the problems in his farm and the area

Task

- a) Construct a dichotomous key to enable Mr. Mbulamaye identify each of the specimens.

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b) Explain to Mr. Mbulamaye which specimen (s) are responsible for;
I. Problems in his farm

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ii. Outbreak of the diseases in the village

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c) How can Mr. Mbulamaye and other community residents avoid the effects of the specimens above

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d) Draw and label the ventral view of the head region of the specimen responsible for the damages in Mbulamaye's farm

END