

535/2
PHYSICS
PAPER 2
November 2023
2¼ hours



WAKISSHA JOINT EXAMINATIONS

End of Year Assessment

SENIOR THREE

PHYSICS PRACTICAL

Paper 2

2 hours 15 minutes

INSTRUCTIONS

The paper consists of one compulsory item.

Marks will be awarded for;

- *Identification of the apparatus to be used in the investigation.*
- *A suitable arrangement of the apparatus.*
- *Generating a logical procedure.*
- *Correctness of the table of results.*
- *The graph drawn.*
- *Mathematical treatment of the results obtained.*
- *The conclusion made.*

A group of students in a certain secondary school were resting under a mango tree. Suddenly, a ripe mango fell from the tree and hit the ground and got smashed. The students picked interest in knowing the rate at which the velocity of the mangoes increased as they fell.

Among the apparatus given to you is a pendulum bob to act as a mango. Carry out a scientific investigation to determine the rate at which the velocity of the mangoes changes as they fell towards the earth.

HINT:

From more advanced books, the period T of an oscillating body is given by $T = 2\pi \sqrt{\frac{l}{g}}$ where l is the length of the string and g is the acceleration due to gravity.

(20 scores)

END