

535/3

PHYSICS (PRACTICAL)

PAPER 3

July/Aug 2026

2 hours

ASSHU ANKOLE JOINT MOCK EXAMINATIONS 2026

Uganda Certificate of Education

PHYSICS PRACTICAL

PAPER 3

535/3

2 HOURS

INSTRUCTIONS TO CANDIDATES

This paper consists of **Two** examination items

Respond to **ONE** item

Any additional item responded to will **NOT** be scored

You are **not** allowed to start working with the apparatus for the first **15** minutes

This time is to enable you read the items thoroughly, check whether you have **all** the apparatus needed for the investigation and **plan** appropriately.

Responses to the item **must** be written in the answer booklet(s) provided.

Indicate the item number you are responding to **clearly** at the **top** of the page.

Graph paper is provided.

Mathematical tables and silent non-programmable calculators may be used

Item 1

The gardener uses hedge scissors whose force constant is between 20Nm^{-1} and 50Nm^{-1} to cut the hedge around the school compound, observed that the scissors were no longer providing the efficient force to cut the hedge easily.

He took it to the Head teacher so that a new one could be bought. The head teacher was advised by the technician to change the spring in the scissors.

The technician recommended for the replacement of the spring with another one of the same force constant range. The Head teacher found the available springs in the shop were not marked with the required specifications.

You are provided with the same spring used in the scissors.

Task;

Design and carry out scientific investigation to determine the force constant of the spring and whether the Head teacher should go on and buy it.

Item 2.

A senior three learner in your school has been complaining that she cannot see clearly on the black board, whenever she sits in front in class.

She was advised by the school nurse to buy spectacles with convex lenses of power ranging from 8D to 12D . After buying the spectacles from the nearby shop, she was not sure if they could serve the intended purpose and approached you for help.

Task:

As a physics learner, you are provided with a lens from the laboratory which has the same properties as those of the spectacles bought, Design and carry out a scientific investigation to determine the power of the spectacles and whether they should be used.

HINT:

In your report, include; the item, variables (Independent, dependent, and controlled) hypothesis, procedure, possible sources of errors, precautions to the stated errors, data presentation (at least 5 data sets), data analysis (using graph) and advise/recommendation.

END