

535/2
PHYSICS
Paper 2
(Practical)
July/August, 2025
2 hours



KAGADI JOINT MOCK EXAMINATIONS CONSULT

Uganda Certificate of Education

PHYSICS

Paper 2
(Practical)

2 hours

INSTRUCTIONS TO CANDIDATES:

This paper consists of two examination items.

Answer one item in all.

*Any additional item answered will **not** be scored.*

*Candidates are **not** allowed to start working with the apparatus for the first quarter of an hour.*

This time is to enable candidates, read the items thoroughly, checking for the apparatus they will need and plan appropriately

A graph paper will be provided

Mathematical tables and silent non – programmable calculators may be used

Item 1

In one of secondary schools in the western region, the laboratory technician in charge of the biology laboratory went to the village for burial, unfortunately this happened when senior one biology class were to use microscopes to study in depth features of a leaf. An effort to get the copy of keys from head of department hit dead end since he was equally out station.

This prompted the biology teacher to consult other departments where he was advised to improvise by using convex lens of magnifying power of 10 D.

Physics laboratory has plenty of such lenses but mixed with other lenses of different specification and are all not labeled.

Task:

As a physics student, carry out a scientific investigation to sort the lenses such that the lesson does not fail.

Item two

A battery manufacturing company has received complaints of its products overheating, and having low life span. This made the company director to have a consultation with its team of experts' in – charge of quality assurance; they predicted that this could be as result of internal resistance of the batteries exceeding 1.8Ω and proved it right.

In a bid to improve on the quality and life span of the batteries, the company's executive director decided that all the newly manufactured batteries should be tested before putting them into the market. Unfortunately, after commencing the process of testing, the machine broken down. This forced them to seek for alternative approach which they are not familiar with, they seek for your expertise.

Task:

Carry out scientific investigation to determine whether their newly manufactured batteries meet minimum standards.