

535/2

PHYSICS (PRACTICAL)

PAPER 2

July/Aug 2026

2hours

ASSHU ANKOLE JOINT MOCK EXAMINATIONS 2026

Uganda Certificate of Education

PHYSICS PRACTICAL

PAPER 2

535/2

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 items **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 school wants to equip the physics laboratory with concave mirrors of focal lengths between **9.0cm to 11.0 cm** inclusive to be used in mock examinations. The Director of studies received samples of the concave mirrors from the supplier who claims that they are of the required range of focal length.

However the Director of studies wants to confirm the supplier's claim before buying the concave mirrors but lacks knowledge. You have been provided with the samples of the concave mirrors that were delivered to the Director of studies.

Task:

Design and carry out a scientific investigation to determine the focal length of the concave mirrors and whether the school should buy them or not.

Item 2.

A certain home owner ordered for dry cells each of emf ranging between **1.3V to 1.7V** and internal resistance ranging from **(0.2 – 1.2) Ω** to be used in lighting the bulb in his flash light. When the cell was delivered to him he observed that there were no specifications marked on it and was not convinced that it was the right cell to be used in his flash light. The home owner would like to establish whether the dry cell received was of the required specifications before payment could be done.

You have been provided with the dry cell received by the home owner.

Task:

Design and carry out a scientific investigation to determine the emf and internal resistance of the dry cell and advise the home owner whether to buy or not.

HINT:

In your report include; the aim, 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