

CONFIDENTIAL INSTRUCTIONS TO SCHOOLS

PHYSICS PAPER 3 (232/3) (PRACTICAL)

INSTRUCTIONS TO SCHOOLS:

1. The information contained in this paper is to enable the head of school and the teacher in charge of Physics to make adequate preparation for this Physics practical examination. **NO ONE ELSE** should have access to this paper or acquire knowledge of its contents. Great care **MUST** be taken to ensure that the information herein does not reach the candidates either directly or indirectly.
2. The apparatus required by each candidate for the Physics Practical examination are set out on below. It is expected that the ordinary apparatus of a Physics laboratory will be available.
3. The **Physics teacher** should note that it is his/her responsibility to ensure that each apparatus acquired for this examination agrees with the specifications as indicated on the list of apparatus below.
4. The question paper will not **be** opened in advance.
5. The Physics teacher is **not** expected to perform the experiments.

NB: Any use of apparatus other than the ones specified may lead to candidates being penalized.

QUESTION ONE

Every student should be provided with the following:

- A lens holder
- Convex lens of (*focal length $15.0\text{ cm} \pm 1\text{ cm}$*)
- A candle
- A white screen
- A metre rule
- A Equilateral triangular glass prism of side 3.7 cm
- A plain sheet of paper
- A soft board
- 4 optical pins /thumbs
- 4 paper pins
- A watch glass of (*diameter $10.0\text{ cm} \pm 1\text{ cm}$*)
- A piece of plasticine *about 20g*
- A marble of (*diameter $1.60\text{ cm} \pm 0.50\text{ cm}$*)
- A Stopwatch- An electronic balance (*to be shared*)
- Vernier calipers (*to be shared*)
- Geometrical set

QUESTION TWO

- An ammeter (**0 – 1 A**)
- A voltmeter (**0 – 3 V** or **0 – 5 V**)
- A variable resistor of **100 Ω**
- A **10 Ω** carbon resistor
- A piece of resistance wire (**SWG 30**) **50cm** long
- Two New Size D dry cells
- A cell holder
- A switch
- Seven connecting wires of **4** should have crocodile clips both ends and **3** with crocodile clip on one end