## 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:

- Two size D dry cells and a cell holder
- One voltmeter ( $0-5 \mathrm{~V}$ )
- One ammeter $(0-1 \mathrm{~A})$ or $(0-2.5 \mathrm{~A})$
- Six carbon resistors each of $\mathbf{1 0 \Omega}$ connected in series labeled $A B$

- One $10 \Omega$ resistor labeled R
- A switch
- 6 connecting wires with crocodile clip at one end
- Jockey attached to a connecting wire


## QUESTION TWO

- Lump of plasticine weighing $\mathbf{2 0 g}$
- 50 g mass
- A Stand, boss and clamp
- 3 pieces of sewing threads each of length about 40 cm
- Meter rule
- 100 ml measuring cylinder
- Some water in a beaker
- Rectangular glass block
- Four optical pins
- Soft board
- Plain paper
- 2 thumb tacks
- Some cellotape 10 cm long
- Vernier calipers (can be shared)
- 30 cm Ruler (Students to come with their own)

