

KIRINYAGA CENTRAL DISTRICT JOINT EXAMINATION - 2013

232/3

PHYSICS

PAPER 3

(PRACTICAL)

CONFIDENTIAL

INSTRUCTIONS TO SCHOOL:

1. The information contained in this paper is to enable the head of school and the teacher in charge of Physics to make adequate preparations for the Joint Kirinyaga 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 page 2 and 3. It is expected that ordinary apparatus of Physics laboratory will be available.
3. The Physics teacher should note that it is his/her responsibility to ensure that each apparatus require for this examination requires with the specifications on page 2 and 3.
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 leads to candiates being penalized.

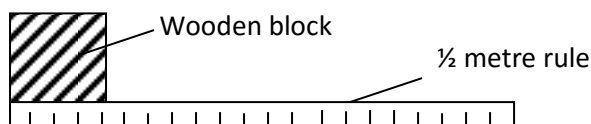
QUESTION 1

Each candidate will require the following.

- A milliammeter.
- A voltmeter (0 – 3V) or (0 – 5V).
- A wire mounted on a mm scale (Nichrome wire SWG 32)
- A switch.
- A long wire with a crocodile clip at one end (crocodile clip to be used as a slider or jockey).
- A micrometer screw gauge (may be shared).
- 5 connecting wires, two with crocodile clips at the end.
- One new dry cell size D.
- Cell holder.

QUESTION 2

- A metallic marble (bob) with hook.
- Two wooden blocks measuring 1cm × 3cm × 4cm.
- Clamp, boss and retort stand.
- Meter rule.
- Stop watch.
- Thread of about 70cm.
- Cello tape (2 pieces of about 10cm long).
- $\frac{1}{2}$ metre rule attached to a wooden block of (5cm × 5cm × 5cm) as shown using cello tape/plastine.



- Candle.
- Lens of focal length 20cm (convex).
- Lens holder.
- Cardboard of 2cm × 20cm with a hole of diameter approximately 4cm at the centre (cross wire placed at the hole)
- Screen (white).
- Vernier calipers (to be shared).
- Match box (to be shared).
- Metre rule.

NB: The cardboard and screen to be supported on wooden block to enable them stand vertically upright.