

**232/3**  
**PHYSICS**  
**PAPER 3**  
**(PRACTICAL)**  
**JULY/AUGUST 2016**  
**TIME: 2½ HOURS**

**CONFIDENTIAL**

**KIRINYAGA CENTRAL SUB-COUNTY EFFECTIVE FORTY  
JOINT EXAMINATION – 2016**

**Question 1:**

- A resistance wire PQ mounted on mm scale. (SWG 30, diameter = 0.32mm)
- Ammeter (0 – 1 A).
- A voltmeter 0 – 3V or 0 – 5V.
- 2 new size D dry cells and a cell holder.
- A switch labelled K.
- Seven connecting wires at least two with crocodile clips.
- A convex lens of focal length 20cm and a lens holder.
- A metre rule.
- A white screen.
- A candle.

**Question 2:**

- A metre rule.
- A knife edge raised 20cm above the bench.
- One 50g mass and a 100g mass.
- Some thread (2) 20cm each.
- Some water in a beaker.
- Some liquid L in a beaker (paraffin).
- Tissue paper.
- A rectangular glass block.

- 4 optical pins.
- A plain sheet of paper.
- Cello tape.
- A piece of softboard.