**Term 1- 2023 OPENER EXAM**

**PHYSICS PAPER 3 (232/3)**

**CONFIDENTIAL**

**FORM FOUR (4)**

**Time:** $2\frac{1}{2} hours$

**INSTRUCTION TO THE PHYSICS TEACHER:**

**The physics teacher should plan with school management to ensure availability of the following apparatus for the learner to carry-out this practical examination.**

**QUESTION ONE:**

**Each candidate to be provided with the following apparatus:**

• One dry cell (size ‘D’)

• A cell holder

• A volt-meter (0-3V)

• An ammeter (0-1A)

• A switch

• Amounted resistance ‘nichrome’ wire labelled AB (diameter of 0.28mm)

**QUESTION TWO**

**Each candidate to be provided with the following apparatus:**

* a metre rule
* 3 optical pins
* 2 small wooden blocks (for holding the pins as shown in the figure 1 below)



**Figure 1**

* a stop watch
* a stand, a boss and clamp
* a piece of sello-tape (about 30 cm long)