**Term 2 - 2022**

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

**CONFIDENTIAL**

**FORM FOUR**

 **Time: 2½ 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.**

Each candidate is expected to be provided with the following apparatus:

**QUESTION ONE**

* A micrometer screw-gauge (may be shared)
* 50 ml plastic beaker (labelled A)
* 75 ml of distilled water (beaker labelled B)
* 8g of solid copper II sulphate (crystal) labelled solid X
* Measuring cylinder
* Thermometer
* Sand paper
* A milli-ammeter
* A volt-meter (0-3V)
* A switch
* Two enameled copper rods (each 10 cm long and about 0.10mm thick)
* Eight connecting wires with at least 4 fitted with crocodile clips
* Glass stirrer

**QUESTION TWO**

* Complete retort-stand (clamp, boss and stand)
* Half metre-rule (wooden)
* Metre-rule (wooden)
* G-clamp (laboratory size clamp)
* Office pin (should be fixed at one end of the half metre-rule to act as a pointer on the scale)
* Four 100g masses (or its equivalent)
* Some celotape
* Vernier calipers (to be shared)
* String/thread (about 30 cm long)
* One 50g mass with a hook
* Knife-edge (at least 15 cm high)
* Knife-edge (about 10 cm high)