**232/3 MECS – TERM 2 2021 PHYSICS CONFIDENTIAL**

**QUESTION 1**

Each candidate will require

* + Centre zero galvanometer
  + One new size D dry cell & cell holder
  + A switch
  + Eight connecting wires each with crocodile clip at one end.
  + A piece of nichrome wire swg 28 (diameter 0.32 mm) of length 30cm. Teacher to mount the piece of wire on piece of wood and label it Y see

Nichrome wire Y

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30cm

Piece of wood

* A resistance (nichrome wire gauge 30) wire labeled AB 100cm long mounted on a millimeter scale
* Six 10 Ohms carbon resistors.
* A jockey (a crocodile clip may be used)
* A micrometer screw gauge

**QUESTION 2**

Each candidate will require:

* + A spiral spring of **spring constant of approximately 10.0N/m.**
  + A complete stand
  + A metre rule.
  + Lens (**focal length = 10cm**) and a lens holder.
  + A candle
  + Screen
  + Three masses (one 100g and two 50g masses)
  + A stop watch