

CONFIDENTIAL
THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION
2021

031/2A

PHYSICS 2A
(PRACTICAL A)

03 HOURS ADVANCE INSTRUCTIONS

1.0 IMPORTANT

- 1.1 GREAT CARE MUST BE TAKEN **NOT** TO DIVULGE THESE INSTRUCTIONS TO BOTH CANDIDATES AND UNAUTHORIZED PERSONS EITHER DIRECTLY OR INDIRECTLY.
- 1.2 MAKE SURE THAT THE CANDIDATES ARE PROVIDED WITH THE APPARATUSES INDICATED IN THESE PRACTICAL INSTRUCTIONS ONLY AND NOT OTHERWISE.

2.0 PREPARATION OF APPARATUSES

In addition to the normal fittings of a Physics laboratory, each candidate will require the following:

- 2.1 Retort stand with its accessories
A cotton thread/string of 130 cm long
A pendulum bob
Cork pads
A stop watch
A metre rule
A half metre rule
A wooden rod of 20 cm long and 10 mm diameter.
- 2.2 Two dry cells (ABC Supper Electric, size D, 1.5 V each) soldered both ends and labelled E
Ammeter labelled A
Voltmeter labelled V
Rheostat (0 – 200 Ω) labelled Rh
Plug key labelled K
4 Ω standard resistor

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4 Ω standard resistor labelled **R** whose value should not be disclosed to candidates
Pieces of connecting wires each of about 20 cm long.