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

NOVEMBER 2017

031/2A

PHYSICS 2A

ACTUAL PRACTICAL A

24 HOURS ADVANCE INSTRUCTIONS

1.0 IMPORTANT
1.1 GREAT CARE MUST BE TAKEN NOT TO DIVULGE THIS INFORMATION TO BOTH CANDIDATES AND UNAUTHORIZED PERSONS EITHER DIRECTLY OR INDIRECTLY.

1.2 PLEASE DO NOT OPEN THE ENVELOPE CONTAINING THE QUESTION PAPER 24 HOURS BEFORE THE TIME OF COMMENCEMENT OF THE EXAMINATION.

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

2.1 2 Meter rules
    1 Needle/optical pin to act as a pointer
    1 Retort Stand with a clamp
    1 G-Clamp
    2 100g masses
    1 50g Mass
    1 Piece of thread of about 20cm
    1 Vernier caliper (This can be shared among the candidates).

2.2 4 Drawing pins.
    4 Optical pins
    1 Glass block
    5 White sheets of paper (plain papers)
    1 Soft board
    1 Protractor.