

## SECTION B

### TASK B4

Candidates will be expected to make measurements on the oscillation of a simple pendulum.

#### Test 1

Apparatus required:

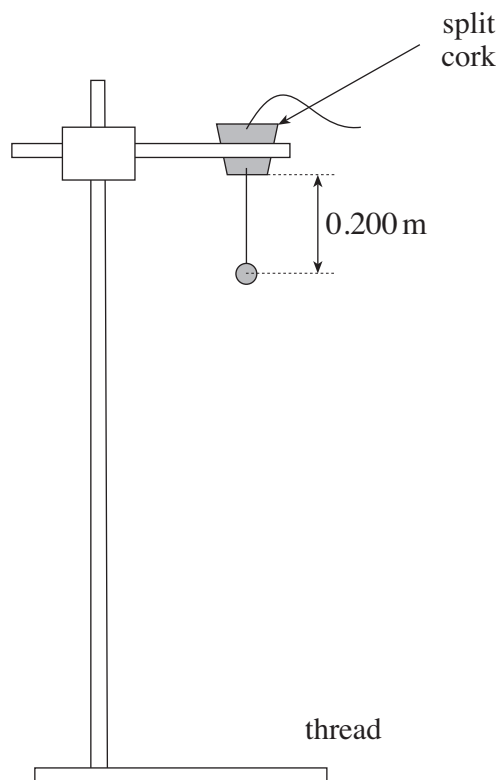
- Simple pendulum mass in the form of either a lead or brass bob.
- Length of cord - approx. 1.4 m
- Stand, clamp and boss - the height of the stand should enable the candidate to adjust the length of the pendulum to 1.20 m
- Stopwatch - Resolution  $\pm 0.01$  s
- Metre rule
- Either a rubber or cork bung split to clamp the cord and enable the candidates to change the length easily
- G-clamp to secure the stand

The apparatus should be assembled and the pendulum should be set to a length of 0.200 m.

Supervisors should instruct candidates not to use extreme swings of the pendulum if this occurs during the test.

The length of the pendulum needs to be reset to 0.200 m at change over.

Apparatus set-up:



#### Test 2

The apparatus is as for **Test 1**, with the base of the cork/bung at a height of 1.400 m above the bench and the pendulum bob at a height of 1.200 m above the bench.