

**Physics**

**Unit 3 Investigative and Practical Skills in AS Physics**

**Investigative Skills Assignment (ISA) Q**

**PHY3T/Q09/TN**

**Instructions to Supervisors**

**CONFIDENTIAL**

- These instructions are provided to enable centres to make appropriate arrangements for the Unit 3 ISA Q test.
- For further details of the administration of the ISA and for information about these instructions, please see the document *Guidance Instructions for the Administration of Investigative Skills Assignment (ISA): GCE Physics*

## **ISA (Q) Wave Speed Investigation**

### **Centre instructions for the investigation**

In this ISA candidates will be investigating the speed of waves on shallow water.

### **Information for centres**

Candidates should be told about one week before undertaking Stage 1 of the ISA that the investigation will be about the speed of waves on water.

Stage 2 of the ISA (the written tests: Section A and B) should take place as soon as possible after the practical investigation.

### **Apparatus**

Centres should ensure that the apparatus provided can be used safely.

- (a) rectangular plastic tray of length about 30 cm and sides of height about 5 cm or more. The sides should preferably be vertical to ensure the wave can traverse the tray at least six times. It may be helpful for the base of the tray to be white. A white sheet of paper placed in the bottom of the tray works well.
- (b) metre ruler or half meter ruler with mm graduations.
- (c) ruler for measuring depth.
- (d) stopwatch or stopclock with precision 0.01 s or better.
- (e) container to pour water into the tray. (Each candidate will require about 1 litre of water.)