



EXPERIMENT 1
MEASUREMENT OF THE SPEED OF SOUND
AIM:
THEORY:
APPARATUS:
PROCEDURE:
RESULTS:

QUESTION

1. A tuning fork of frequency 512 Hz is used to produce sound waves in a tube. The water level is adjusted so that the sound is loudest. The distance between the water level and the closed end of the tube is 30 cm. Calculate the speed of sound in air.

2. A tuning fork of frequency 400 Hz is used to produce sound waves in a tube. The water level is adjusted so that the sound is loudest. The distance between the water level and the closed end of the tube is 25 cm. Calculate the speed of sound in air.

ANSWER
1. $v = 340 \text{ m/s}$
2. $v = 340 \text{ m/s}$