

THEORY OF THE TEST



Figure 1: Simple Pendulum

AIM OF THE TEST

To determine the acceleration due to gravity (g) using a simple pendulum.

To study the effect of the length of the pendulum on its period.

To verify the relationship between the period and the length of the pendulum.

To determine the value of g for different lengths of the pendulum.

To study the effect of the mass of the bob on the period of the pendulum.

To determine the value of g for different masses of the bob.

To study the effect of the amplitude of the oscillation on the period.

To determine the value of g for different amplitudes of the oscillation.

THEORY: A simple pendulum consists of a small mass (bob) suspended by a string from a fixed point. When the bob is displaced from its equilibrium position, it oscillates back and forth. The time taken for one complete oscillation is called the period (T). The period of a simple pendulum is given by the equation: