

Question Paper

Topic 1: Mechanics

Q1. What is the term used to describe the force that resists the motion of an object?

Friction

Gravity

Magnetism

Acceleration

Answer: Friction

Explanation: Friction is the force that opposes the relative motion or tendency of such motion of two surfaces in contact.

Q2. Explain the difference between speed and velocity in terms of physics.

Answer: Speed refers to how fast an object is moving, while velocity includes both speed and direction of the object's motion.

Explanation: Speed is a scalar quantity, whereas velocity is a vector quantity that takes into account both the magnitude (speed) and direction of motion.