

Date: - August 5, 2024
Teacher: - Charanjit Gaur

TENDER HEART HIGH SCHOOL; SEC-33B, CHD

Subject - PHYSICS

Page - 3

CLASS - VIII

CHAPTER - 3 (LAWS OF MOTION)

3(A): - Contact and Non Contact Forces

Q1: → What are the main effects produced by a force applied on a body?

Ans: → (1) It can change the state of rest or ^{of} motion of the body.
(2) It can change the size or shape of the body.

Q2: → Define force.

Ans: → A force is a physical cause which changes or tends to change either the shape or size or the state of rest or of motion of the body.

Q3: → Define Contact force. Give two examples.

Ans: → The force applied on the body by making a physical contact with it is called as Contact force.

For example; (a) Force of friction
(b) Normal reaction force

Q4: → Define non contact force. Give two examples.

Ans: → It is the force experienced by bodies without being physically in touch. It is also known as force at a distance

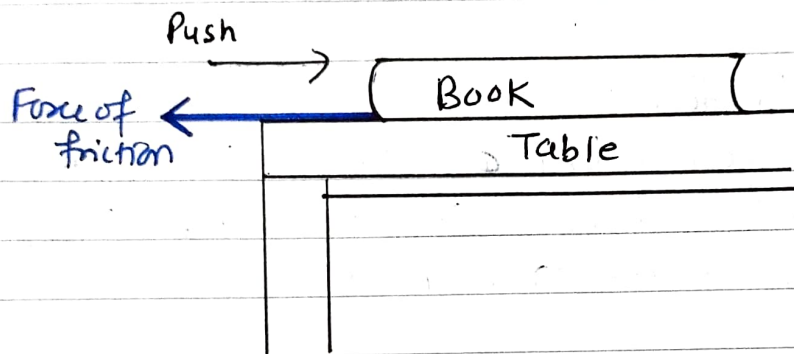
For example; (a) Gravitational force
(b) "Magnetic force"

Q5: → What is a rigid body or rigid object?

Ans: → It is a body or object in which the inter-spacing between its constituent particles does not change whatever be the force applied on it

Q6: → Define frictional force? Draw a neat and clean diagram showing a frictional force acting on a body.

Ans: → frictional force: → When a body slides or rolls over the surface of another body, a force starts acting in a direction opposite to the motion of a body. This force is called as frictional force. This force acts along the surface in contact.



Q7: → What is a normal reaction force? Draw a neat ^{labelled} diagram showing normal reaction force acting on a body.

Ans: → Normal reaction force: → When a body is placed on a surface, it exerts a force equal to its weight in downward direction. But body does not fall because the surface exerts an equal and opposite force on the body normal to the surface (perpendicular to surface). This force is known as normal reaction force.

