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SUBJECT:- PHYSICS

CLASS:- IXTH

DATE:- 27/05/XXI

SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 2. (FORCE AND LAWS OF MOTION)(BASED ON NCERT PATTERN)

Force:- It is a physical quantity which can change the shape, size, position, direction and velocity of a body.

Characteristics of force:- Force has both magnitude and direction, making it a vector quantity. It is measured in the SI unit of Newton. It is represented by the symbol F.

Effects of Force:-

- It can change the speed of a body.
- It can change the direction of Force and Laws of Motion of a body.
- It can change the shape of a body.

Balanced and Unbalanced Forces

(i) Balanced Forces: If the resultant of applied forces is equal to zero, it is called balanced forces.

For example: In the tug of war game when the force applied by both teams is equal in magnitude then the rope does not move in either side. This is due to the balanced forces in which resultant of applied forces comes out to be zero.

(ii) Unbalanced Forces: If the resultant of applied forces are greater than zero, the forces are called unbalanced forces.

To move an object unbalanced forces are to be applied from the opposite directions. In case of unbalanced forces acting on a body, it moves a in the direction of the greater force.