

Laws of Motion Points to Remember:

- ❖ Mechanics is divided into statics and dynamics.
- ❖ Ability of a body to maintain its state of rest or motion is called Inertia.
- ❖ Moment of the couple is measured by the product of any one of the forces and the perpendicular distance between two forces.
- ❖ SI unit of force is newton (N). C.G.S unit is dyne.
- ❖ When a force F acts on a body for a period of time t , then the product of force and time is known as 'impulse'.
- ❖ The unit of weight is newton or kg f
- ❖ The weight of a body is more at the poles than at the equatorial region.
- ❖ Mass of a body is defined as the quantity of matter contained in the object. Its SI unit is kilogram (kg).
- ❖ Apparent weight is the weight of the body acquired due to the action of gravity and other external forces on the body.
- ❖ Whenever a body or a person falls freely under the action of Earth's gravitational force alone, it appears to have zero weight. This state is referred to as 'weightlessness'.