**NEWTONS FIRST LAW OF MOTION**

**If the vector some of all the forces acting on a particle is zero then and only then the particle remains unaccelerated (i.e., remains at rest moves with constant velocity).**

**“acceleration=0 if and only if force =0”.**

**NEWTON SECOND LAW OF MOTION**

**The acceleration of a particle as measured from an inertial frame is given by the (vector) sum of all the forces acting on a particle divided by its mass.**

**In symbols: acceleration = force/mass or force =mass \*acceleration.**

**( If the force cease to act at some instant , the acceleration becomes zero at the some instant. )**

**NEWTON THIRD LAW OF MOTION**

**The two forces F1 and -F2 connected by newton’s third law are called action -reaction pair. Any one may be called ‘action’ and the other ‘reaction’.**

**The forces exerted by F1 and F2 are equal in magnitude but opposite in direction.**