Physics Hons. Paper-I "Group- A" B.Sc. Hons-Part- I

Theory of Relativity

Classical Theory Speed of light.

• Inertia frame (Galilean Frame)

Newton's first law of inertia states that a bodyat rest remains at rest and body in motion continues with constant velocity in a straight line unless an external force is applied to it. There are two types of reference.

- → (i) Accelarated fram of reference.
- → (ii) Un accelarated fram of reference.

Postulates of special theory of relativity.

- (i) The natural laws must preserve their forms relative to all observers in a state of relative uniform motion.
- (ii) The velocity of light in vacuum is independent of the velocity of observer or the velocity of the source.

