Light - Reflection and Refraction
Reflection of light

REFLECTION OF LIGHT:

When a beam of light falls on any surface, a part of it is sent back into the same medium from which it is coming. This phenomenon is known at the reflection of light.

(i) The ray of light which falls on the mirror surface is called the incident ray. The angle of incidence is the angle made by the incident ray with the normal at the point of incidence.

(ii) The ray of light which is sent back of the mirror is called the reflected ray. The angle of reflection is the angle made by the reflected ray with the normal at the point o incidence.

(iii) The normal is a line at right angle to the mirror surface at the point os incidence.

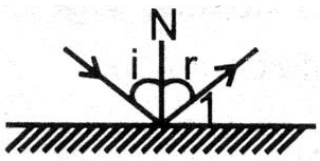
(a) Laws of reflection:

(i) Incident ray, normal ray and the reflected ray all lie on the same plane.

(ii) The angle of incidence in always equal to the angle of reflection.

(b) Type of reflection:

(i) **Regular reflection:** When a parallel beam of light is incident on a plane highly polished surface, the reflected beam will also be parallel and hence the whole light falling on the surface is reflected in a definite direction. Such a reflection is called regular reflection.



Such a surface is called a reflector, like a plane mirror, a polished metal surface.

(ii) **Irregular reflection :** When a parallel beam of light is incident on rough surface or irregular surface, the rays get reflected in all direction and the reflected light spreads over a wide area.