



PHYSICS

NCERT - NCERT PHYSICS(TELUGU)

REFRACTION OF LIGHT AT PLANE SURFACES

Improve Your Learning

1. The speed of the light in a diamond is 1, 24, 000 km/s. Find the refractive index of diamond

if the speed of light in air is $3,00,000 \text{ km/s}$.



[View Text Solution](#)

2. Refractive index of glass relative to water is $\frac{9}{8}$. What is the refractive index of water relative to glass?



[View Text Solution](#)

3. The absolute refractive index of water is $\frac{4}{3}$.
What is the critical angle?



[View Text Solution](#)

4. Determine the refractive index of benzene if the critical angle is 42° .



[View Text Solution](#)

5. A light ray is incident on air-liquid interface at 45° and is refracted at 30° . What is the refractive index of the liquid? For what angle

of incidence will the angle between reflected ray and refracted ray be 90^0 ?



[View Text Solution](#)

6. A ray of light travels from an optically denser to rarer medium. The critical angle of the two media is 'c'. What is the maximum possible deviation of the ray?



[View Text Solution](#)