

Work Sheet

Q1) What are the two conditions required for total internal reflection?

Ans=

Two important conditions for total internal reflection are angle of incidence i should be greater than critical angle i_c ; Ray should travel from denser to rarer medium.

Q2)

A fish in the pond of water appears at a depth of 6 m. What is the actual depth of the fish if water is $\frac{4}{3}$?

Ans

actual depth = Ref. Index \times apparent depth

$$\Rightarrow 6 \times \frac{4}{3} = 8 \text{ m} \dots \text{ answer}$$

Q3)

A rectangular glass slab of thickness 8 cm is placed on a figure. The eye is kept exactly above this dot. If the refractive index of glass is 1.6, then by what distance the figure will appear to raised

$z = 3 \text{ cm}$