

$$\epsilon = \frac{E}{E_b} \quad \text{--- (6)}$$

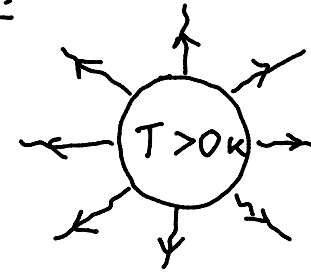
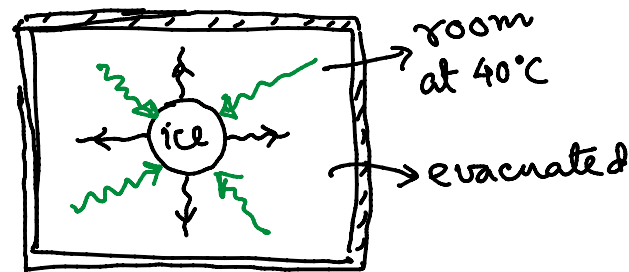
by (6)

$$E = \epsilon E_b \quad \text{--- (7)}$$

; $\epsilon \leq 1$

$\epsilon = 1$ for black body.

✓ Prevost's Theory of Heat Exchange :



PREVOSTS's Theory of Heat Exchange:

The salient features of this theory are:

- All bodies emit thermal radiations as well as absorb radiations from surroundings at all temperatures above 0K.
- The amount of emission increases with increase in the temperature of the body.
- There is continuous exchange of heat between a body and its surroundings. The rise or fall of temperature is due to this exchange.

Case I : if $(\Delta Q)_{\text{radiated}} > (\Delta Q)_{\text{absorbed}}$