

**LEACHING REQUIREMENT, (L.R)**

$$L \cdot R = \frac{D_d}{D_a} = \frac{C_i}{C_d} = \frac{(E \cdot C)_i}{(E \cdot C)_d}$$

where,  $D_d$  = Depth of water drained out per unit area

$D_a$  = Depth of water applied per unit area

$C_i$  = Salt content of irrigation water

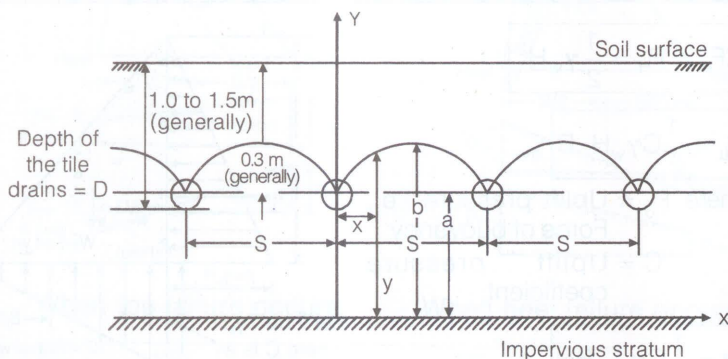
$C_d$  = Salt content of drained water

$(E \cdot C)_i$  = Electrical conductivity of irrigation water

$(E \cdot C)_d$  = Electrical conductivity of drained water.

**DEPTH & SPACING OF TILE DRAINS**

$$S = \frac{4k}{q}(b^2 - a^2)$$



where,  $S$  = Spacing of tile drains in m

$k$  = Coefficient of permeability in m/s

$q$  = Total discharge per unit length of tile drain  $m^3/s/m$

$b$  = height of water table above the impervious layer

$a$  = depth of impervious stratum below centre of the drain.

$$q = \frac{\left(\frac{p}{100}\right)}{24 \times 3600} \cdot (S \times l)$$

where,  $P$  = Annual rainfall in meter at a place.