## Ques 5:

let $o(s') =$ order of Schema.

$\Rightarrow$ Prob. of destruction of single bit
$= P_d = P_m$.

$\Rightarrow$ Prob. of survival of single bit =
$P_s = 1 - P_m$.

$\Rightarrow$ Prob. of survival of schema
$\Rightarrow P_s = (1 - P_m)^{o(s')}$

$\qquad \cong \quad 1 - o(s') \cdot P_m$
$\quad$ for $P_m \ll 1$.

$\Rightarrow \quad P_s = 1 - t * \dfrac{1}{t} = \emptyset$.

$\Rightarrow$ Prob. $= \emptyset$.