b) even $\Rightarrow A = 0$ (10)

$\therefore C_1 = -\frac{Hz^2}{D_1} + B$

$\cancel{C_2 = G\cosh\sqrt{R/D_2}\, z}$

$z < -L/2$

$\Rightarrow C_2 = E e^{\sqrt{R/D_2}\, z}$

$z > L/2 \Rightarrow C_2 = E e^{-\sqrt{R/D_2}\, z}$

$C_1 = C_2$ when $z = \pm L/2$

$-\frac{HL^2}{4D_1} + B = E e^{-\sqrt{R/D_2}\, L/2}$ (1)

$\frac{\partial C_1}{\partial z} = \frac{\partial C_2}{\partial z}$

$-\frac{2H}{D_1} \cdot \frac{L}{2} = -E\sqrt{\frac{R}{D_2}}\, e^{-\sqrt{R/D_2}\, L/2}$

$+\frac{HL}{D_1} = +E\sqrt{\frac{R}{D_2}}\, e^{-\sqrt{R/D_2}\, L/2}$ (2)

(2) ÷ (1) $\quad \frac{HL/D_1}{-HL^2/4D_1 + B} = \sqrt{\frac{R}{D_2}}$