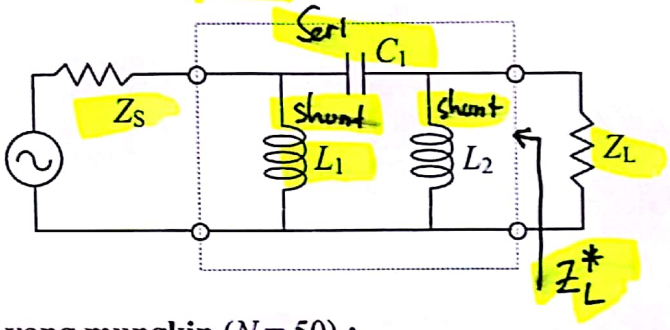
a. Rangkaian penyesuai impedansi (tipe Π untuk menahan frekuensi tinggi, HPF)



b. **Salah satu solusi yang mungkin** ($N = 50$) :

$Z_S = 25 + j25\ \Omega$ ($z_S = 0.5 + j0.5$), $Z_L = 50\ \Omega$ ($z_L = 1$), $f = 50$ MHz, $Q = 5$

$L_1 = 50 / [2\pi \times (50 \times 10^6) \times 47] = 398$ nH (paralel) 39,8 nH

$C_1 = 1 / [2\pi \times (50 \times 10^6) \times 0,4 \times 50] = 160$ pF (seri) 160 pF

$L_2 = 50 / [2\pi \times (50 \times 10^6) \times 5] = 31,8$ nH (paralel) 31,8 nH