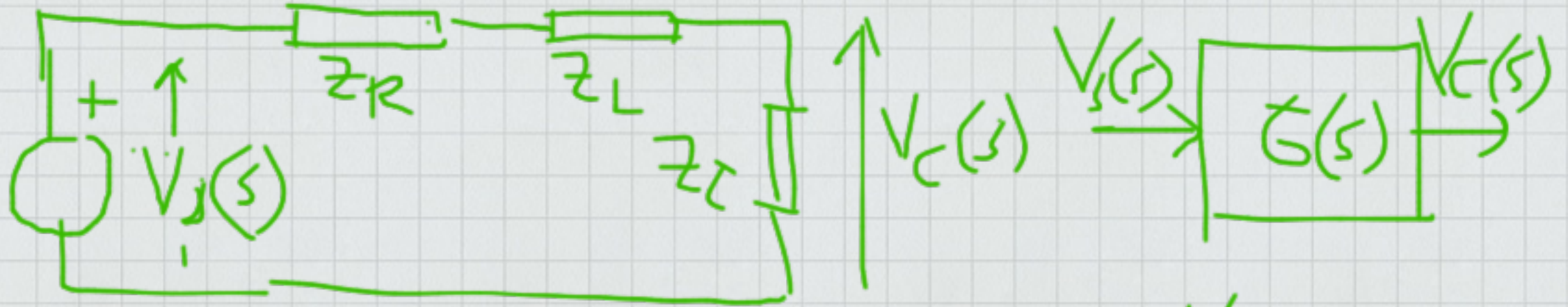


Konsep Impedansi



$$\begin{aligned} G(s) &= \frac{V_C(s)}{V_s(s)} = \frac{Z_C}{Z_R + Z_L + Z_C} = \frac{1/s}{R + Ls + 1/s} \\ &= \frac{1}{LCs^2 + RCs + 1} = \frac{1/LC}{s^2 + \frac{R}{L}s + \frac{1}{LC}} \\ &= \frac{K}{s^2 + 2\zeta\omega_n s + \omega_n^2} \end{aligned}$$

$\omega_n = \frac{1}{\sqrt{LC}} \text{ rad/sec}$
 $\zeta = \frac{R}{2} \sqrt{\frac{C}{L}}$