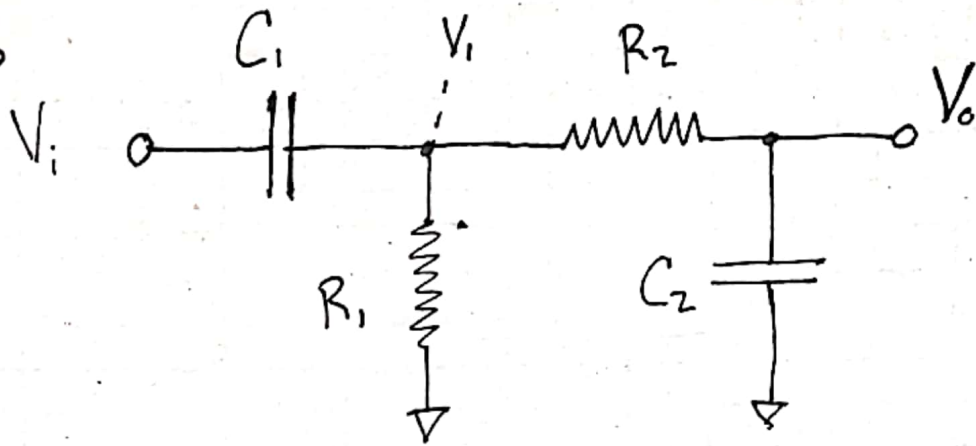
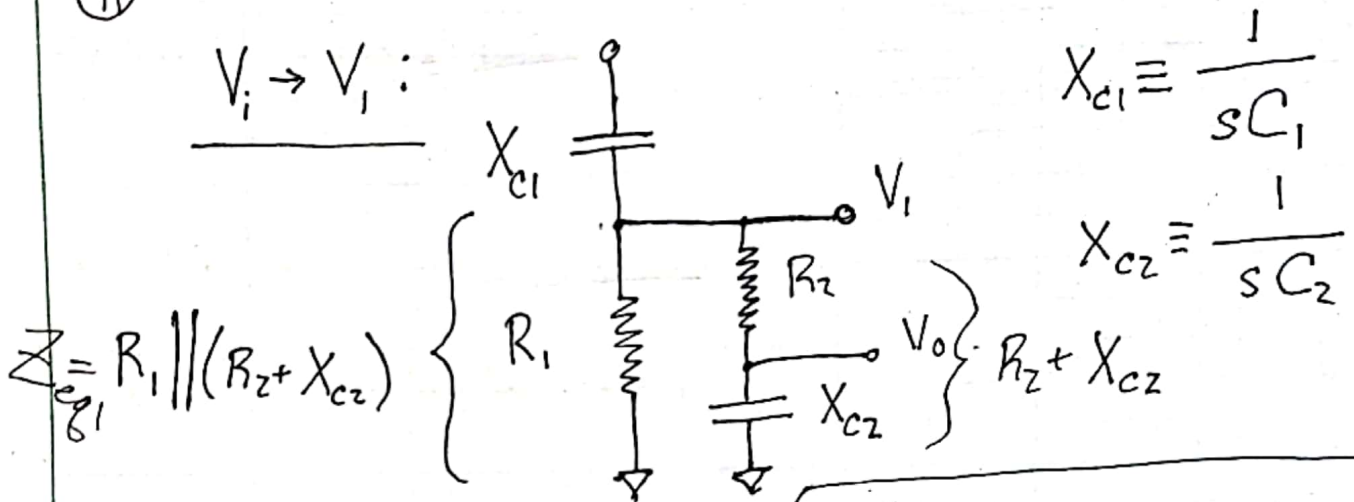


BAND
PASS



①

$V_i \rightarrow V_1$:

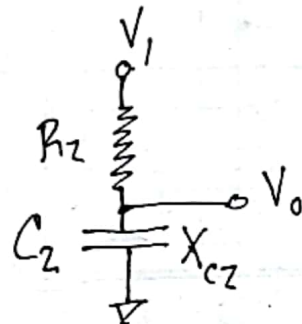


Voltage Divider

$$\frac{R_1 \parallel (R_2 + X_{c2})}{X_{c1} + R_1 \parallel (R_2 + X_{c2})} = \frac{V_1}{V_i}(s)$$

②

$V_1 \rightarrow V_o$



Voltage Divider

$$\frac{X_{c2}}{R_2 + X_{c2}} = \frac{V_o}{V_1}(s)$$

③

$V_i \rightarrow V_o$

$$H(s) = \frac{V_o}{V_i}(s) = \left(\frac{V_1}{V_i}(s) \right) \cdot \left(\frac{V_o}{V_1}(s) \right)$$

$$H(s) = \left(\frac{R_1 \parallel (R_2 + X_{c2})}{X_{c1} + R_1 \parallel (R_2 + X_{c2})} \right) \cdot \left(\frac{X_{c2}}{R_2 + X_{c2}} \right)$$

