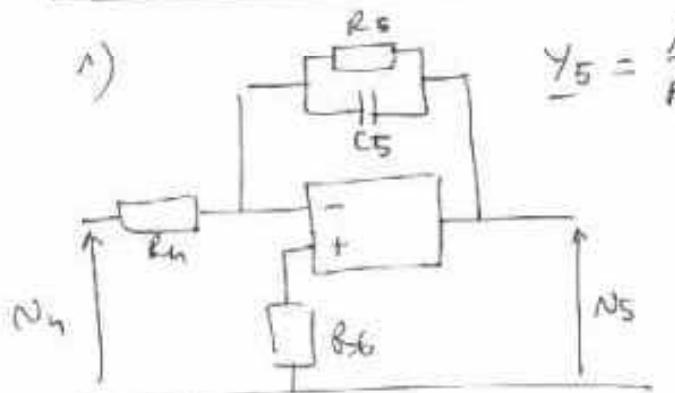




Etude du filtre

Formule 87

1)



$$Y_5 = \frac{1}{R_5} + j C_5 \omega$$

$$T = \frac{N_5}{N_4} = - \frac{R_5}{R_4} = - \frac{1}{R_4 Y_5}$$

$$I = - \frac{1}{\frac{R_4}{R_5} + j R_4 C_5 \omega} = - \frac{R_5}{R_4} \cdot \frac{1}{1 + j R_4 C_5 \omega}$$

$$\frac{R_4}{R_5} (1 + j R_4 C_5 \omega)$$

$$\omega_0 = \frac{1}{R_4 C_5}$$

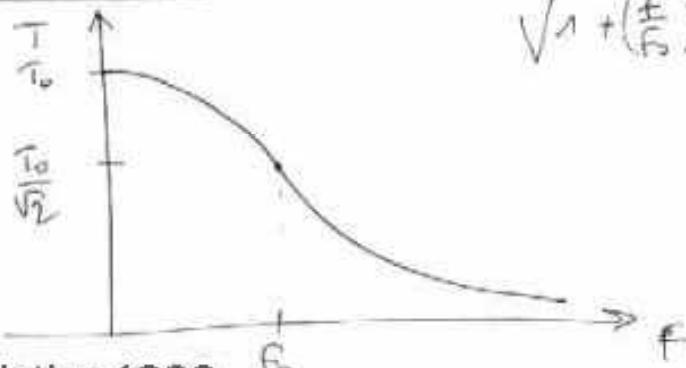
$$f_0 = \frac{\omega_0}{2\pi} = \frac{1}{2\pi R_4 C_5}$$

$$I = T_0 \frac{1}{1 + j \frac{F}{f_0}}$$

$$T_0 = - \frac{R_5}{R_4}$$

2) module de I :

$$T = T_0 \frac{1}{\sqrt{1 + (\frac{F}{f_0})^2}}$$



filtre passe-bas