Pere Sánchez

Estudi previ practica 6 sessió 2

exercici 2.1

$$\frac{1}{f_{osc}} = (R_{S1} + 2R_{S2}) \cdot C_{S1} \cdot \ln(2)$$

$$R_{S2} = 54,15\ k\Omega \quad \checkmark$$

$$\frac{T_H}{T} = \frac{(R_{S1}+R_{S2}) \cdot C_{S1} \cdot \ln(2)}{(R_{S1}+2R_{S2}) C_{S1} \cdot \ln(2)} = 0,5 \quad \checkmark$$

exercici 2.2

- ~~Mantindre~~ ea estabilitat a la ~~sortida~~

Netejar les interferències que apareixen en la tensió d'aquest node

exercici 2.3

$$T_{of} = \frac{2 \cdot d}{V} = \frac{2 \cdot 6}{340} = 0,0353$$

$$f_{REP} = \frac{1}{0,0353} = 28,3\ Hz \quad \checkmark$$

exercici 2.4

$$T = \frac{N_{cicles}}{f_{osc}} = \frac{10}{40k} = 250\ \mu s \quad \checkmark$$

exercici 2.5

$$T = 250 \cdot 10^{-6} = \ln\left(\frac{2V_{cc} - 2,1}{V_{cc} - 2,1}\right) \cdot R_{G1} \cdot C_{G1}$$

$$R_{G1} = \frac{250 \cdot 10^{-6}}{\ln\left(\frac{24-2,1}{12-2,1}\right) \cdot 220 \cdot 10^{-9}} = 1431,28\ \Omega \quad \checkmark$$

exercici 2.6

$$\frac{1}{f_{REP}} = (R_{G1} + R_{G2}) \cdot C_{G1} \cdot \ln(2)$$

$$f_{REP} = \frac{1}{(221431,28) \cdot 220 \cdot 10^{-9} \cdot \ln(2)} = 29,62\ Hz \quad \checkmark$$