Exercício 08/09

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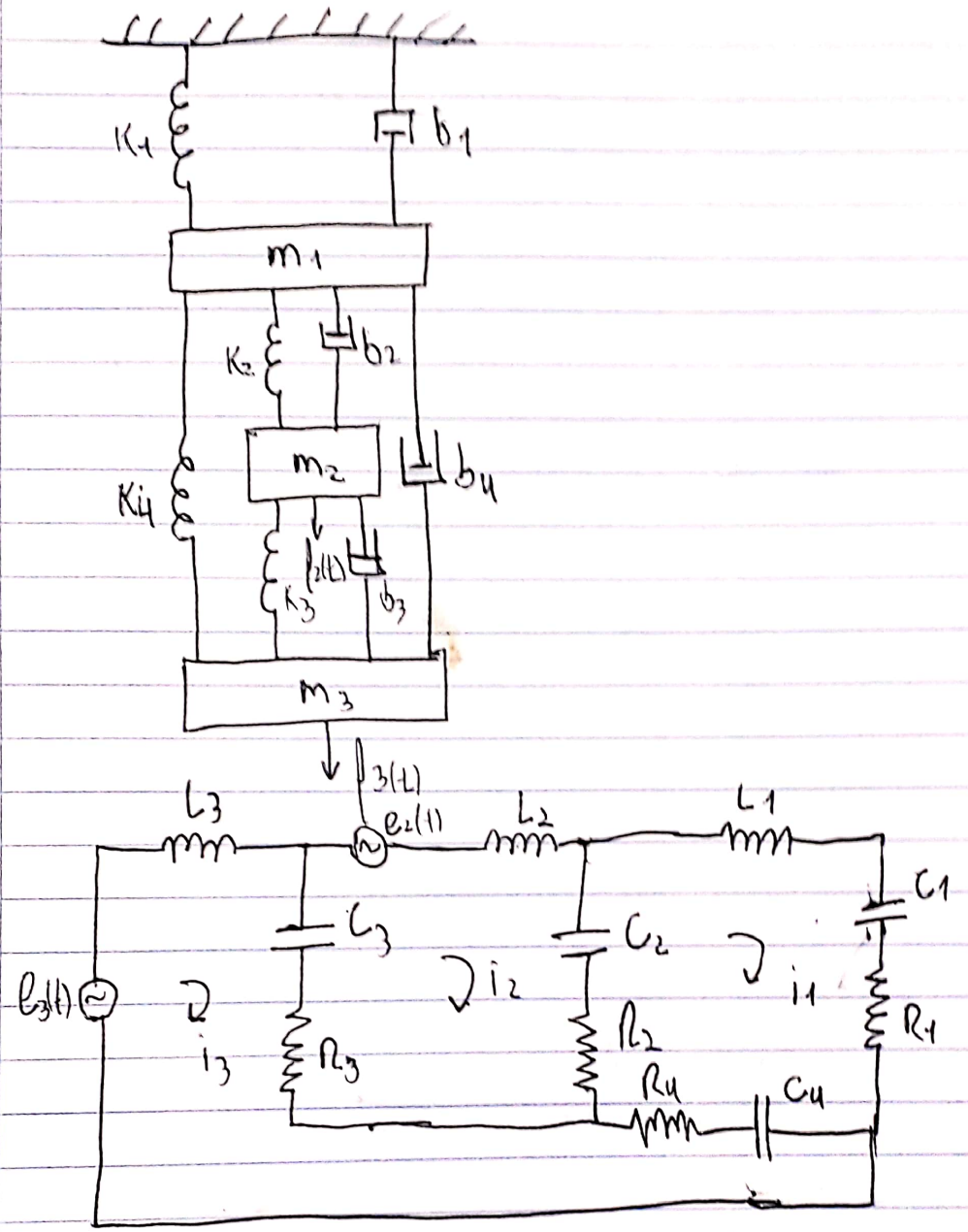
3)



$$\left(R_4 + \frac{1}{C_4 D}\right)(i_3 - i_1) + \left(R_3 + \frac{1}{C_3 D}\right)(i_3 - i_2) + L_3 D i_3 = e_3(t)$$

$$\left(R_3 + \frac{1}{C_3 D}\right)(i_2 - i_3) + \left(R_2 + \frac{1}{C_2 D}\right)(i_2 - i_1) + L_2 D i_2 = e_2(t)$$

$$\left(R_4 + \frac{1}{C_4 D}\right)(i_1 - i_3) + \left(R_2 + \frac{1}{C_2 D}\right)(i_1 - i_2) + \left(L_1 D + R_1 + \frac{1}{C_1 D}\right) i_1 = 0$$

$$m_3 D v_3 + \left(b_3 + \frac{K_3}{D}\right)(v_3 - v_2) + \left(b_4 + \frac{K_4}{D}\right)(v_3 - v_1) = f_3(t)$$

$$m_2 D v_2 + \left(b_2 + \frac{K_2}{D}\right)(v_2 - v_1) + \left(b_3 + \frac{K_3}{D}\right)(v_2 - v_3) = f_2(t)$$

$$\left(m_1 D + b_1 + \frac{K_1}{D}\right) v_1 + \left(b_2 + \frac{K_2}{D}\right)(v_1 - v_2) + \left(b_4 + \frac{K_4}{D}\right)(v_1 - v_3) = 0$$