Automatic control

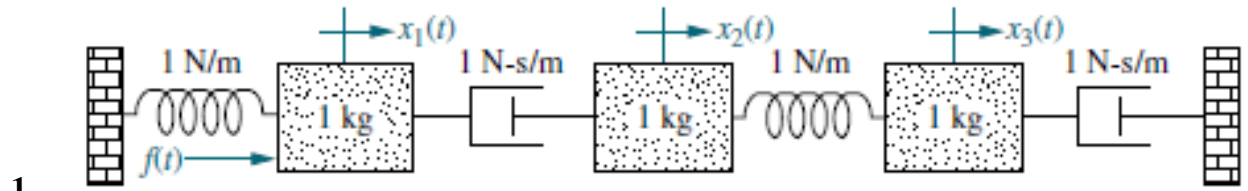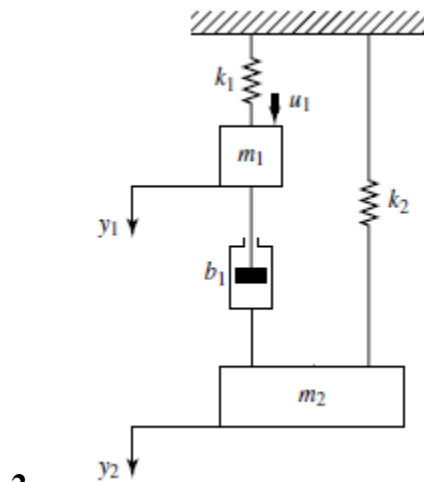**Homework number: [3]**

Student name:_____

Student registration number:_____

Class number: ○ class [1] 10:10 – 11:00   ○ class [2] 8:10 – 9:00
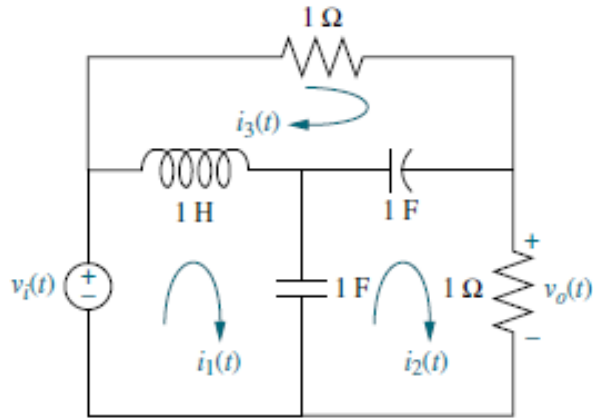

Assignment: find the required transfer function for the following electrical and mechanical systems by using block diagram drawing and reduction or by direct solution:

1.

The required transfer functions: $X_3(s)/X_1(s)$ and X_2/X_1. Here x_1 is the input.

2.

The required transfer function: Y_2/U_1. Here u_1 is the input.

3.

The required transfer function is Vo(s) / Vi(s)

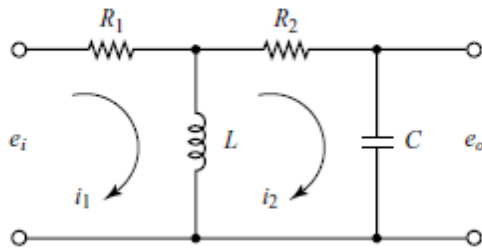**B–3–7.** Obtain the transfer function $E_o(s)/E_i(s)$ of the electrical circuit shown in Figure 3–36.

Figure 3–36 Electrical circuit.

4.