

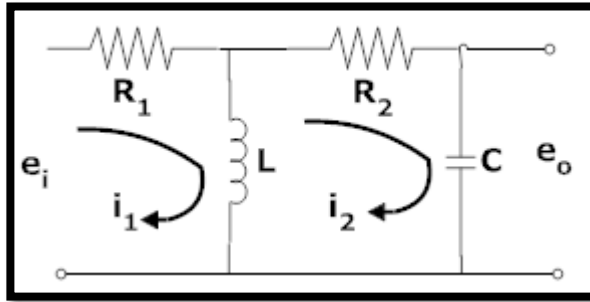
Automatic Control Systems

Course code: ECE252

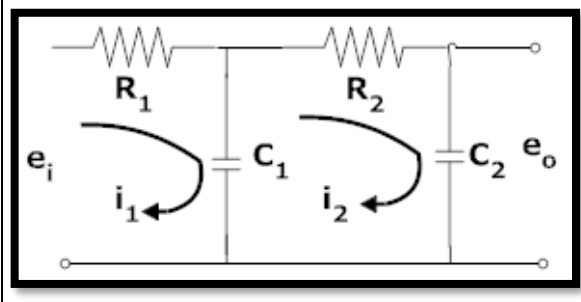
Sheet 03 — Modeling Electrical Circuit

1. For the electrical circuit shown in Figure below.
 - Obtain the transfer function $E_o(s)/E_i(s)$
 - Draw the block diagram

(a)

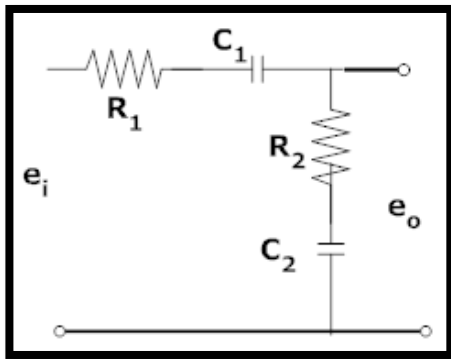


(b)

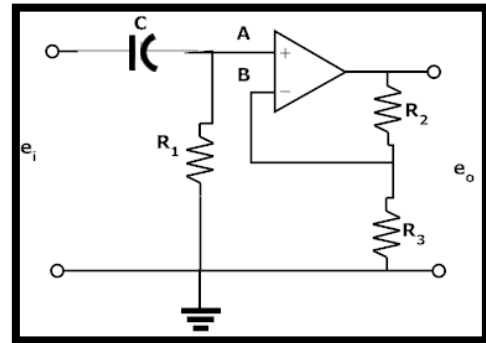


2. Derive the transfer function of the electrical circuit shown in Figure below

(a)



(a)



3. Obtain the transfer function of the op-amp circuit shown in Figure below

(a)

