

Week 3 – Activity 01

EE352 AUTOMATIC CONTROL

Figure 1 shows an RLC network.

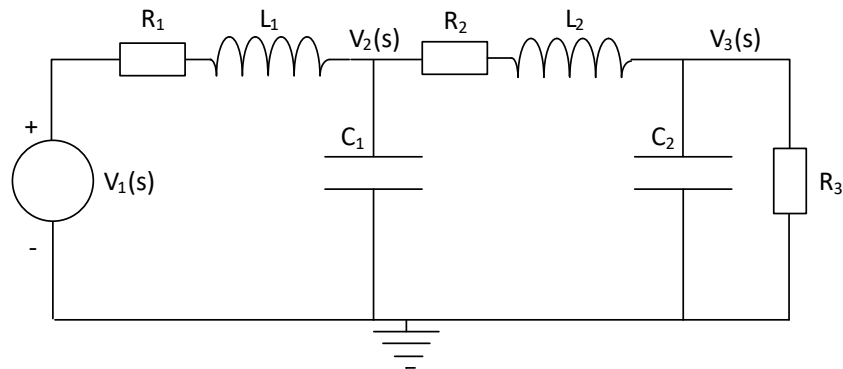


Figure 1

Consider the circuit in the s-domain.

- i. Derive the transfer function $\frac{V_3(s)}{V_1(s)}$, where V_1 is a voltage source and V_3 is the voltage at the load end.
- ii. If the load resistance R_3 is open circuited, deduce the new transfer function.

Deadline: 8:00 am on 12th January 2026