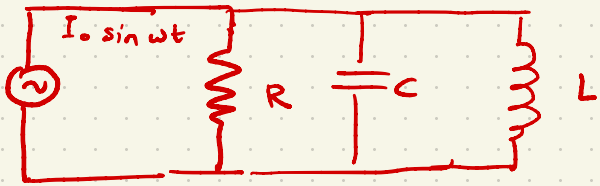
Tutorial 03

1. Convert the given LCR circuit expression into forced damped system



2. For a 1-D string under tension T find out the energy stored in the string if it supports wave given by displacement $y(x,t)$

3. Prove that 2-D membrane supports the wave eqn.

$$\frac{\partial^2 z}{\partial t^2}(x,y,t) = \frac{s}{\sigma}\left[\frac{\partial^2 z}{\partial x^2} + \frac{\partial^2 z}{\partial y^2}\right]$$

4. Find out ω and V relation for the 2-D wave