Assignment #1 hints:

#1.20 The method for calibrating the cables and connectors involves measuring the short circuit and open circuit impedances. With these values, the equivalent impedance of the fixture can be determined: $Z_{in} = \sqrt{Z_{sc} Z_{oc}}$ where Z_{in} is the impedance of the fixture as seen by the network analyzer. The DUT is then hooked up to this fixture and the actual device measurements taken.

#1.21 It is a non-ideal resistor. Determine in variables, the function of the impedance *Z*. That' all I want for a solution. However, you can determine the *L* and *C* values by measuring the slope of the curve in the appropriate regions. Remember that the plot is a LOG-LOG graph.

#1.26 A reverse biased diode can be represented as a series combination of a resistor R_s and junction capacitance *C*, where

$$C = C_o \left(1 - \frac{V_{bias}}{V_{diff}} \right)^{-1/2}.$$

Assume that the *RFC* (inductor) and *C* have infinite values.