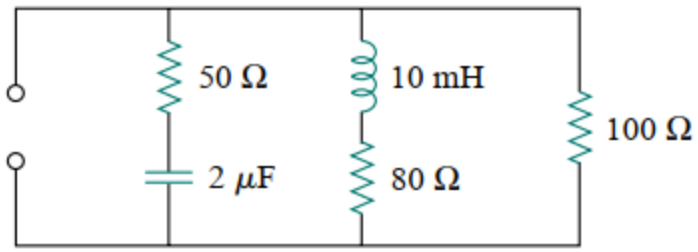
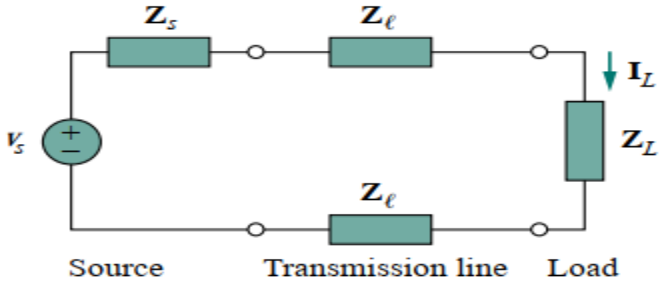
Class Test _2

Q.1. The network in the following figure is part of the schematic describing an industrial electronic sensing device. What is the total impedance of the circuit at 2 kHz?



Q.2. A power transmission system is modeled as shown in the following figure. Given the source voltage

$\mathbf{V}_s = 115\ 0^\circ$ V, source impedance
$\mathbf{Z}_s = 1 + j0.5$, line impedance
$\mathbf{Z}_l = 0.4 + j0.3$, and load impedance
$\mathbf{Z}_L = 23.2 + j18.9$, find the load current $\mathbf{I}_L$.



Q.3. Compute the rms value of the waveform depicted in following figure.