Given Information,

$C_1 = 0.01\mu F$

$R_1 = 470k\Omega$

$R_2 = 5.1k\Omega$

$R_3 = 100k\Omega$

According to Maxwell's bridge,

$$R_x = \frac{R_2R_3}{R_1} = \frac{5.1\times10^3\times100\times10^3}{470\times10^3}$$

$$= \frac{51000}{47} = 1085.106\Omega$$

$$= 1.085\,k\Omega$$

$$L_x = C_1R_2R_3$$

$$= 0.01\times10^{-6}\times5.1\times10^3\times100\times10^3$$

$$= 0.01\times5.1\times100$$

$$= 5.1H$$

The series equivalent of the unknown impedance is