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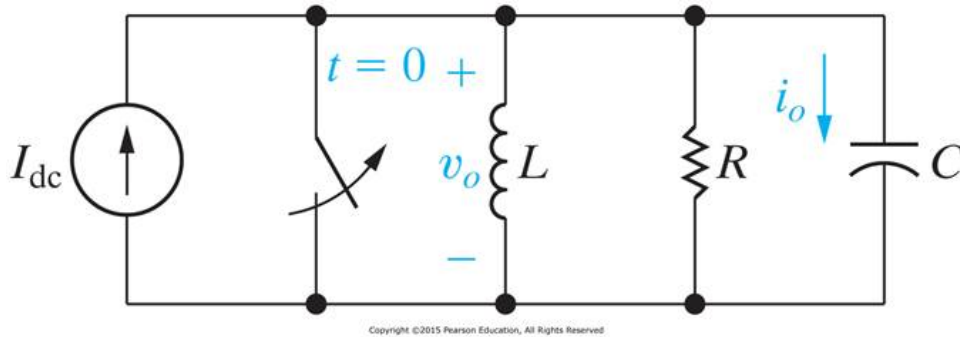
Time taken 28 mins 44 secs

Grade 100.00 out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00



Quiz 5c

The circuit parameters for this circuit are

 $R = 2 \, \Omega$ (Ohm) $L = 50 \, \text{mH}$ (milli H) $C = 2,000 \, \mu\text{F}$ (micro F) $I_{dc} = 450 \, \text{mA}$ (milli A)

Also given
$$V_0(s) = \frac{\frac{I_{dc}}{C}}{s^2 + s\frac{1}{RC} + \frac{1}{LC}}$$

Find the time domain voltage $v_o(t)$ for $t \geq 0$. (t equal to or greater than zero)

$$v_o(t) = [1.5 \exp[-50 t] + -1.5 \exp[-200 t]] u(t) \, \text{V}$$

Answer is in the form $v_o(t) = [A e^{Bt} + C e^{Dt}] u(t) \, \text{V}$ and where $|B|$ is less than $|D|$

Correct

Marks for this submission: 100.00/100.00.