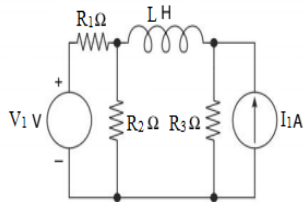
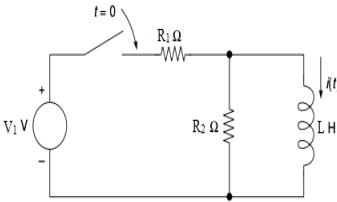
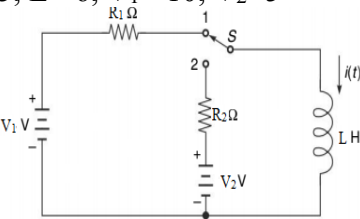
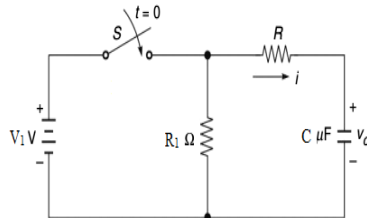
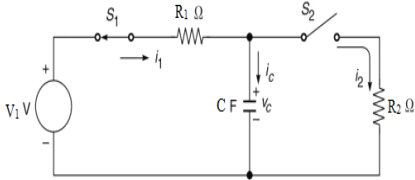
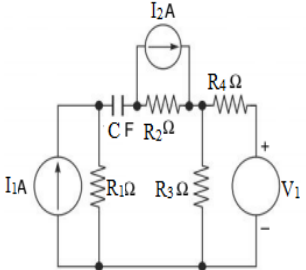
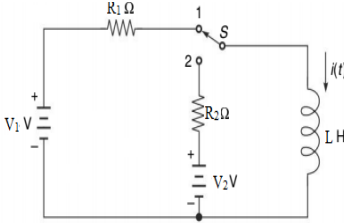
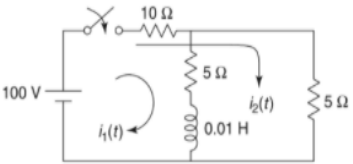
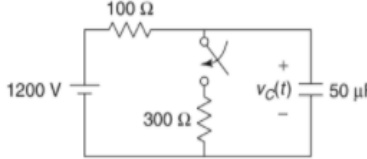
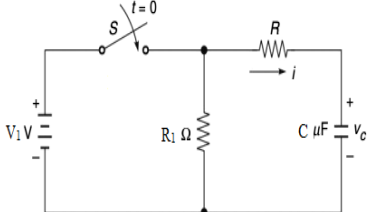




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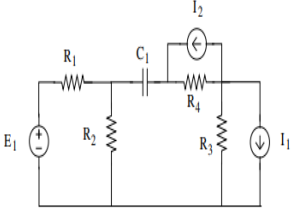
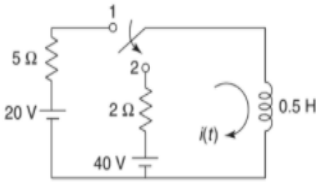
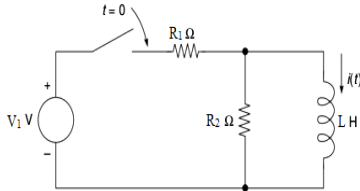
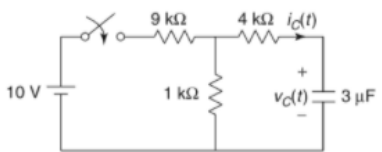
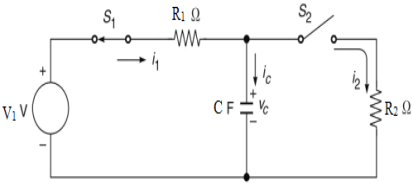
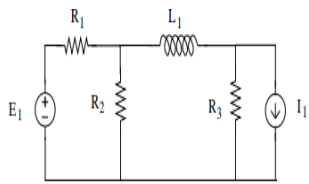
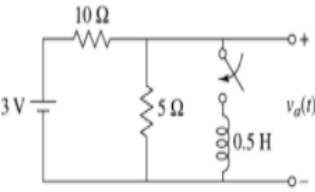
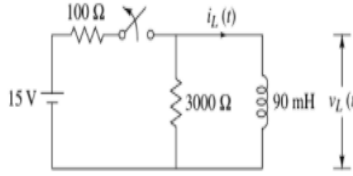
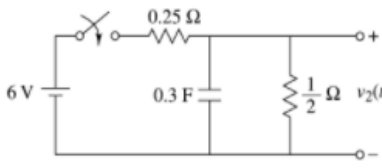
Applied Science and Humanities Department

Batch X1	<p>1. Calculate time constant for the given circuit. $R_1=3$, $R_2=6$, $R_3=2$, $L=3$, $V_1=3$, $I_1=2$</p> 	<p>2. Calculate $i(t)$. $R_1=10$, $R_2=30$, $L=5$, $V_1=5$</p> 	<p>3. The switch S has been in position 1 for long time. It is thrown to position 2 at $t=0$. Compute $i(t)$. $R_1=10$, $R_2=5$, $L=6$, $V_1=10$, $V_2=5$</p> 	<p>4. The switch has been closed for long time. Calculate v_c and i if switch is thrown open. $V_1=200$, $R_1=600$, $R=100$, $C=4$</p> 	<p>5. Switch S_1 is closed for long time. At $t=0$ switch S_2 is closed. Compute v_c. $R_1=6$, $R_2=6$, $V_1=10$, $C=1/2$</p> 
Batch X2	<p>1. Calculate time constant for the given circuit. $R_1=3$, $R_2=6$, $R_3=2$, $R_4=4$, $C=2$, $V_1=3V$, $I_1=2A$, $I_2=4A$</p> 	<p>2. The switch S has been in position 1 for long time. It is thrown to position 2 at $t=0$. Compute $i(t)$. $R_1=5$, $R_2=10$, $L=3$, $V_1=5$, $V_2=10$</p> 	<p>3. Calculate $i_1(t)$ and $i_2(t)$ when switch is closed at $t=0$.</p> 	<p>4. The switch is opened for long time and it has been closed at $t=0$. Find $v_c(t)$</p> 	<p>5. The switch has been closed for long time. Calculate v_c and i if switch is thrown open. $V_1=100$, $R_1=300$, $R=200$, $C=2$</p> 



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Batch X3	<p>1. Calculate time constant for the given circuit. $R_1=3$, $R_2=6$, $R_3=2$, $R_4=4$, $C=3F$, $E_1=3V$, $I_1=2A$, $I_2=4A$</p> 	<p>2. Switch is moved from 1 to 2 at $t=0$, Calculate $i(t)$.</p> 	<p>3. Calculate $i(t)$. $R_1=10$, $R_2=30$, $L=5$, $V_1=5$. Also observe the effect on $i(t)$, if $R_1=20$, $R_2=15$, $L=3$, $V_1=10$.</p> 	<p>4. The switch has been closed at $t=0$. Find $i_c(t)$ and $v_c(t)$</p> 	<p>5. Switch S_1 is closed for long time. At $t=0$ switch S_2 is closed. Compute v_C. $R_1=8$, $R_2=8$, $V_1=5$, $C=2$</p> 
Batch X4	<p>1. Calculate time constant for the given circuit. $R_1=4$, $R_2=8$, $R_3=2$, $L_1=3H$, $E_1=3V$, $I_1=2A$</p> 	<p>2. Steady state is achieved with switch is open. At $t=0$, Switch is closed. Find $v_a(t)$</p> 	<p>3. Steady state is reached with switch closed. It is opened at $t=0$. Obtain $i_L(t)$ and $v_L(t)$</p> 	<p>4. The switch is open for a long time and closed at $t=0$. Determine $v_2(t)$</p> 	<p>5. Switch S_1 is closed for long time. At $t=0$ switch S_2 is closed. Compute V_C. $R_1=4$, $R_2=4$, $V_1=10$, $C=1$</p> 