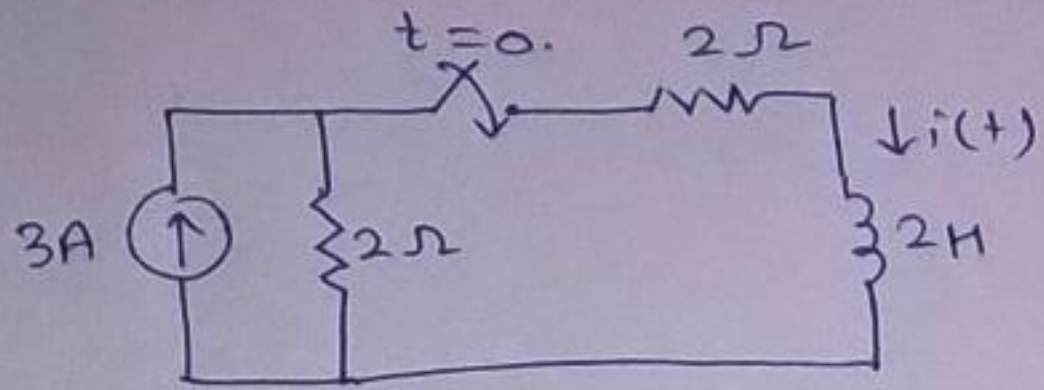
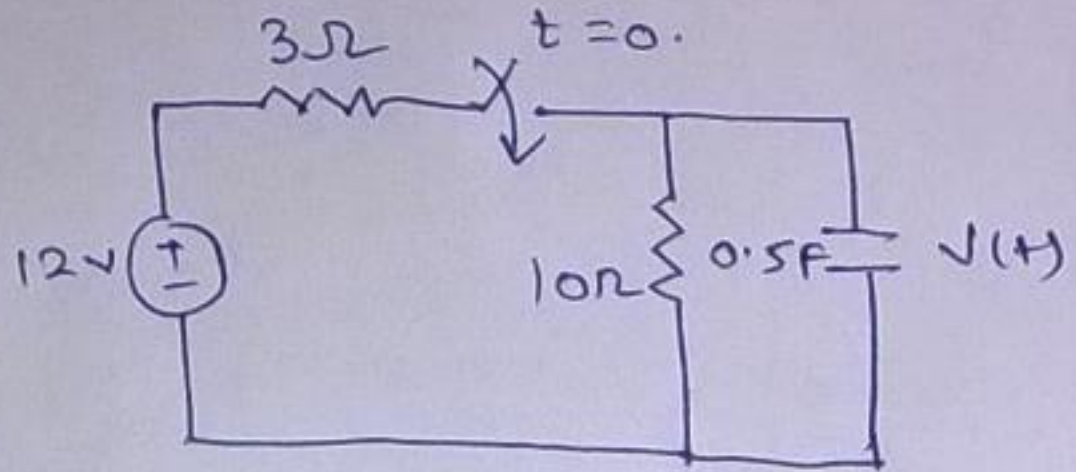


HA#2.

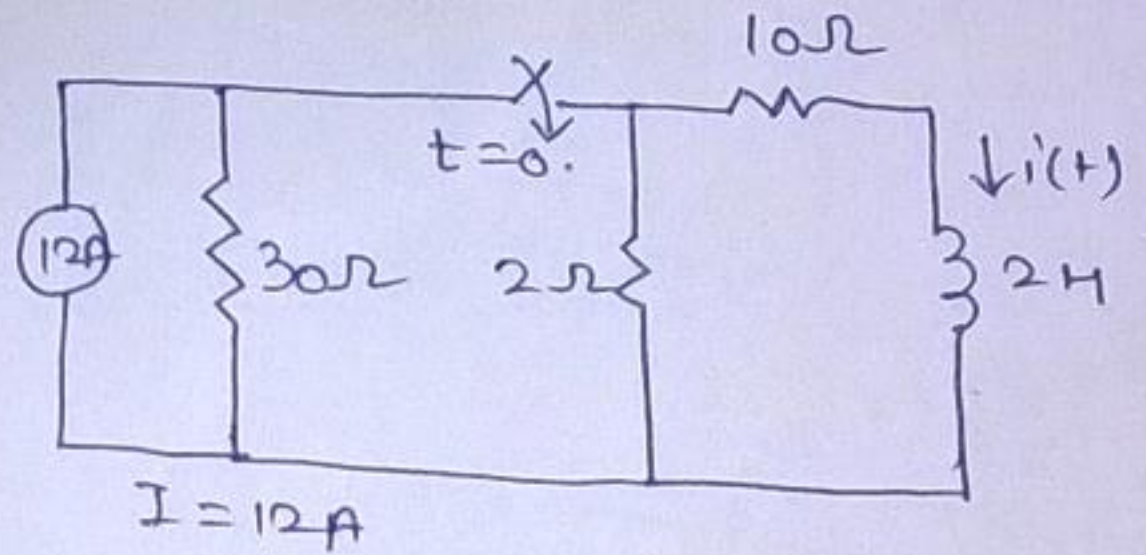
Q1) Find the response of  $i(t)$  for  $t > 0$  using LTSpice. (5 marks)



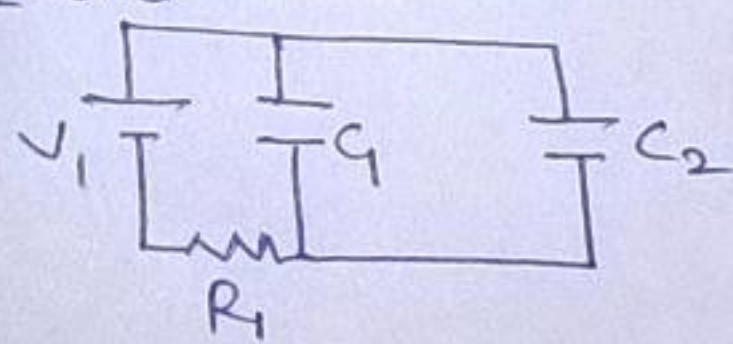
Q1-2) Plot  $v(t)$  for  $t > 0$  in LTSpice. (5 marks).



Q1-3) Find  $i(t)$  manually. Also plot  $i(t)$  for  $t > 0$  by LTSpice. (10 marks)



Q4)  $V_1 = 10V$ ,  $C_1 = 47\mu F$ ,  $C_2 = 20\mu F$   
 $R_1 = 3k\Omega$



Plot voltage across both the capacitors by LTSpice. (5 marks).

Q1-5) The switch in the fig. has been opened for a long time. If the closes at  $t=0$ , find  $v(t)$ . Plot the same in MATLAB.

