

Question (4) (30 marks)

Construct the S domain circuit in Fig. (3) for $t > 0$ if $v_x(0) = 2V$, and $i(0) = 1A$. Find $v_o(t)$ in the circuit.

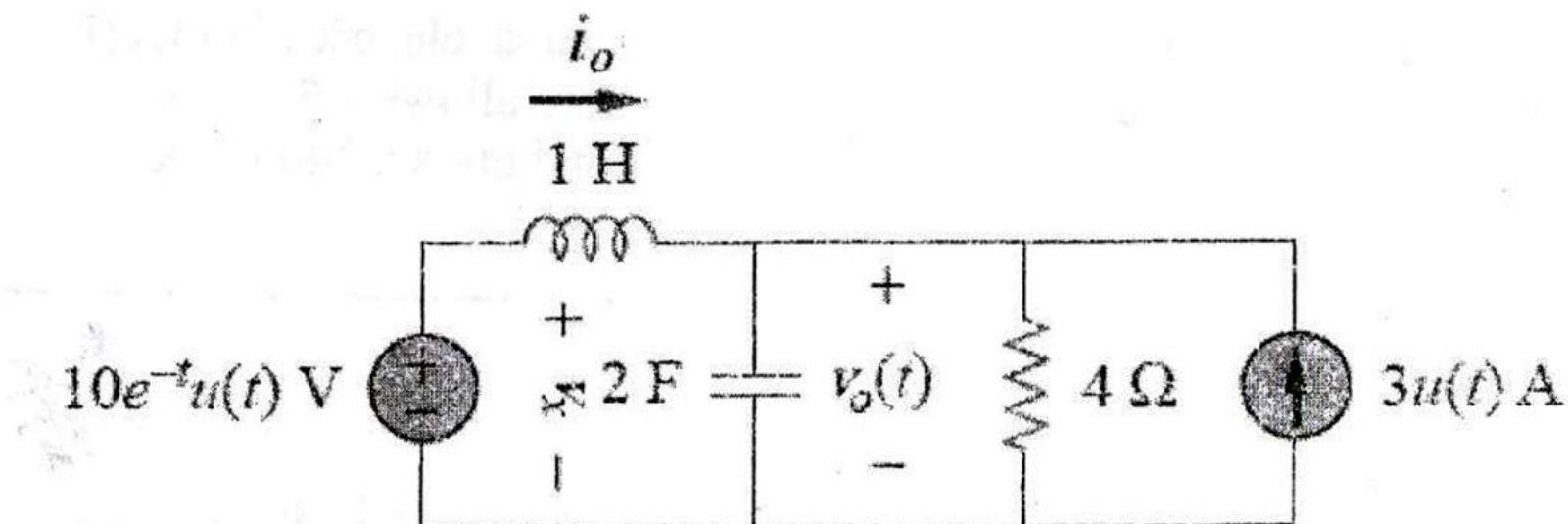
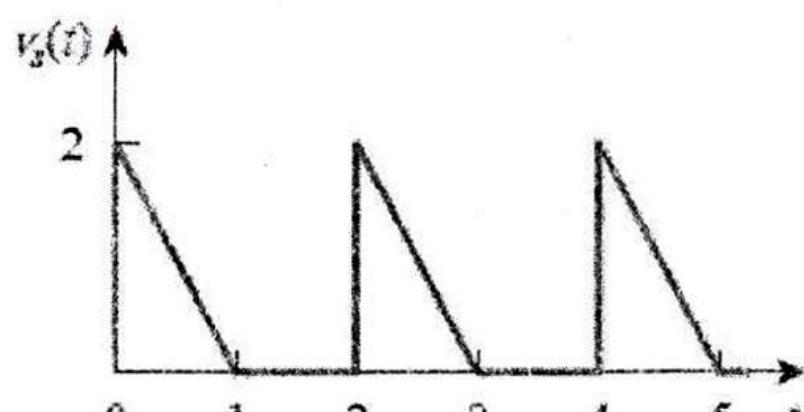


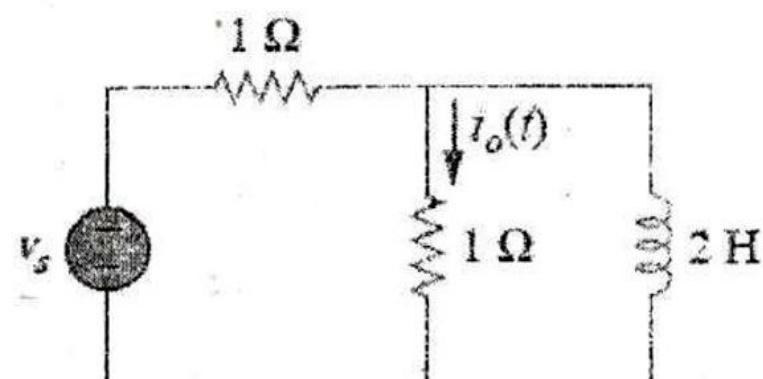
Fig. (3)

Question (5) (30 marks)

If the periodic current source V_s in Fig. (4-a) is applied to the circuit in Fig. (4-b), determine the first three nonzero harmonics of $i_o(t)$.



(a)



(b)

Fig.(4)