

U-7-3

1. Calculate the equivalent resistance R_{ab} in the Fig 1 (20%)

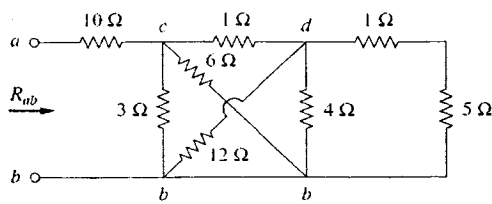


Fig. 1

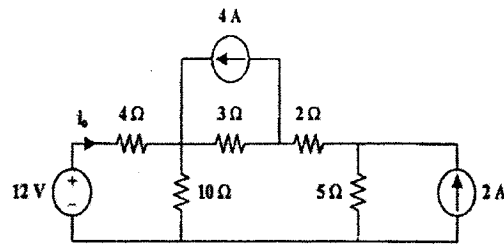


Fig. 2

2. Find i_o in the circuit of Fig. 2 (20%)

3. Find the Thevenin equivalent as seen by R in Fig. 3 (20%)

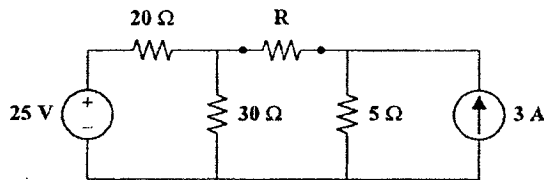


Fig. 3

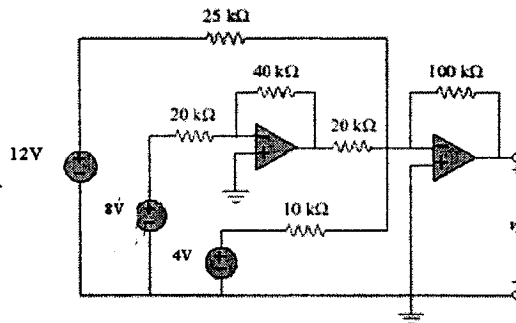


Fig. 4

4. For the circuit in Fig. 4, find v_o . (20%)

5. Determine V_x in the circuit shown in Fig. 5. Let $\dot{i}_s(t) = 5 \cos(100t + 40^\circ)$. (20%)

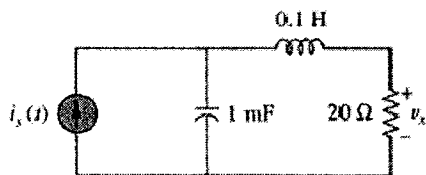


Fig. 5