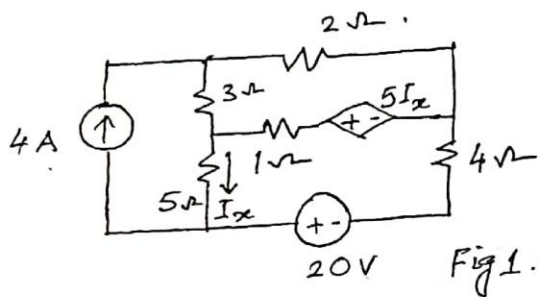
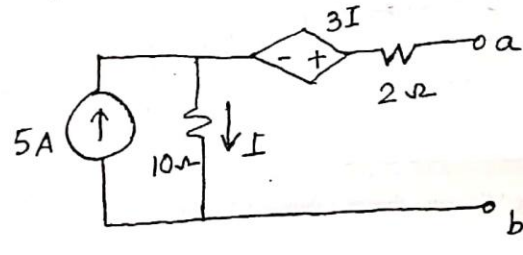
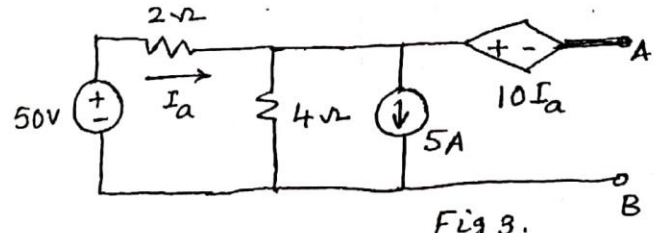
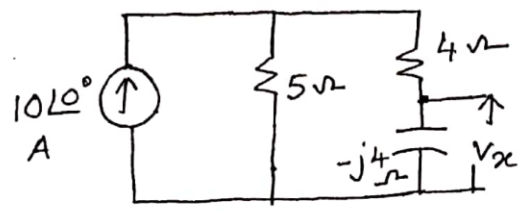
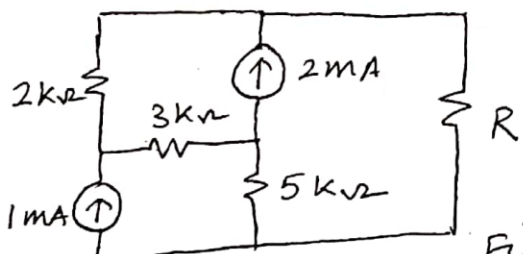
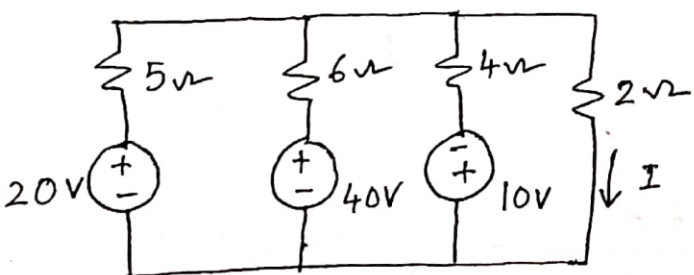


Sub:	Electric Circuit Analysis	Code:	18EE32
Date:	12/10/2019	Duration:	90 mins
		Max Marks:	50
		Sem:	3
		Branch:	EEE

Answer Any FIVE FULL Questions

	Marks	OBE	
		CO	RBT
<p>1 Use superposition theorem to find <math>I_x</math> of the network shown in fig1.</p>  <p style="text-align: center;">Fig 1.</p>	[10]	CO3	L4
<p>2 Find current I using Norton's theorem shown in fig2.</p>  <p style="text-align: center;">Fig 2.</p>	[10]	CO3	L4
<p>3 Find Thevenin's equivalent circuit across the terminal A-B of the network shown in fig3.</p>  <p style="text-align: center;">Fig 3.</p>	[10]	CO3	L4

4	<p>Verify Reciprocity theorem for the circuit shown in fig4.</p>  <p style="text-align: center;">Fig 4.</p>	[10]	CO3	L3
5a	<p>Obtain the condition for an alternating voltage source to transfer maximum power to the load when the load impedance is the complex conjugate of the source impedance.</p>	[5]	CO3	L3
5b	<p>Find the value of load resistance R when maximum power is transfer across it in the network shown in fig(5b).</p>  <p style="text-align: center;">Fig(5b).</p>	[5]	CO3	L3
6a	<p>State and prove Millman's theorem.</p>	[4]	CO3	L3
6b	<p>Determine the current I by applying Millman's theorem shown in fig(6b).</p>  <p style="text-align: center;">Fig(6b).</p>	[6]	CO3	L3