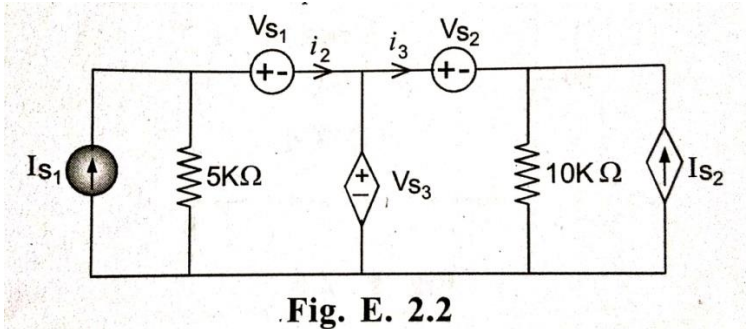
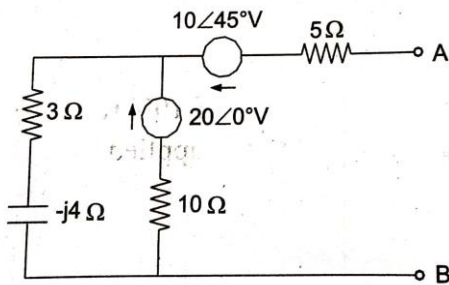


ASSIGNMENT : 2

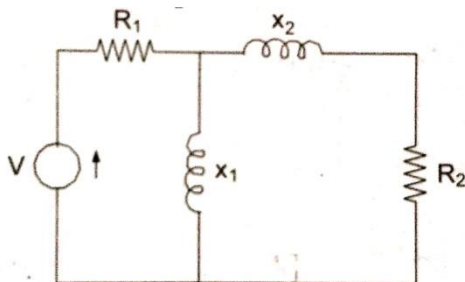
1. Using super position theorem to find power generated by each of the five source in fig. given that $V_{S1} = 4V$, $V_{S2} = 6V$, $V_{S3} = 10^3 i_3$, $I_{S1} = 2mA$, $I_{S2} = 0.5 i_2$.



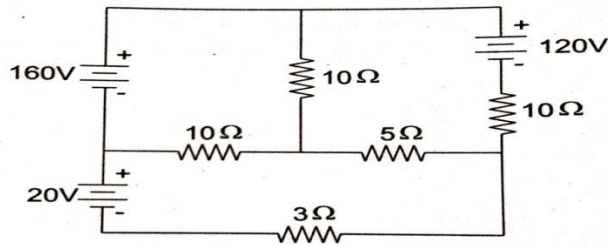
2. Replace the active network show in fig. with a Norton's equivalent network at the terminals AB.



3. Determine X_1 and X_2 in term of R_1 and R_2 to give maximum power dissipation in R_2 .



4. Use Thevenin's theorem to find the power delivered to the 3Ω resistance in the network of fig.



5. Apply super position theorem to find the current in $(3 + j4) \Omega$ impedance in a network of fig.

