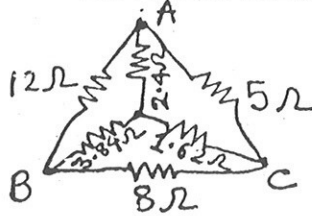


Note: All questions are compulsory.

Q.1 a) State and explain Superposition Theorem. (3)

b) Find the equivalent resistance across the terminals B and C. (2)

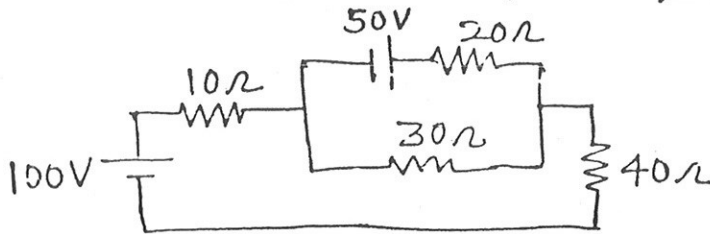


c) Differentiate Ideal and Practical current sources. (2)

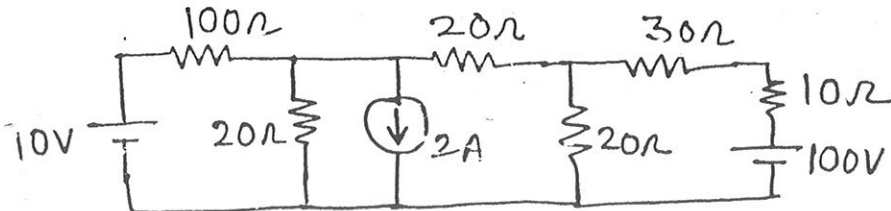
d) State and prove the maximum power transfer theorem. (3)

Q.2 Attempt any ONE.

a) Find the current through  $30\Omega$  resistor by mesh analysis. (5)

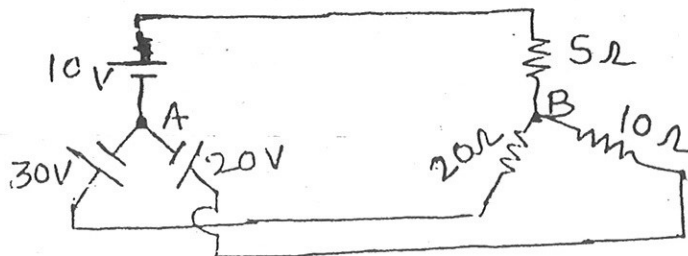


b) Using node-pair voltage method, find the current through  $100\Omega$  resistor.



Q.3 Attempt any ONE.

a) Using Norton's Theorem, find current which would flow in a  $25\Omega$  resistance connected between A and B (5)



b) Obtain thevenin's equivalent circuit across A & B

