EE 101: Electrical Sciences, Tutorial - 3

DEPARTMENT OF ELECTRONICS & ELECTRICAL ENGINEERING

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Name : Roll No. : Tutorial Group :

[Q1 is for pre-tutorial. Solve it in the space provied and submit at beginning of tutorial]

Q-1 $F(A,B,C,D) = \sum(6,9,10,11,14,15) + d(2,7,8,13)$.

Using K-map solve for (a) minimal SOP form (b) minimal POS form.

Q-2 Find the voltage across terminal pair xx' for the network shown in Fig.1 using:

(a) Thevenin Equivalent circuit
(b) Norton Equivalent circuit

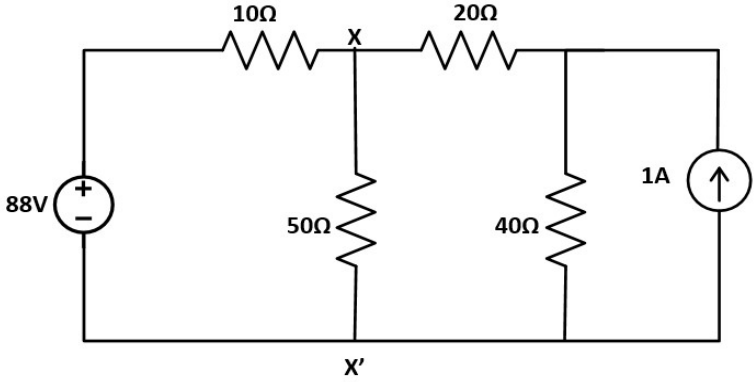

Fig.1

Q-3 Determine the node voltages for the network shown in Fig.2.

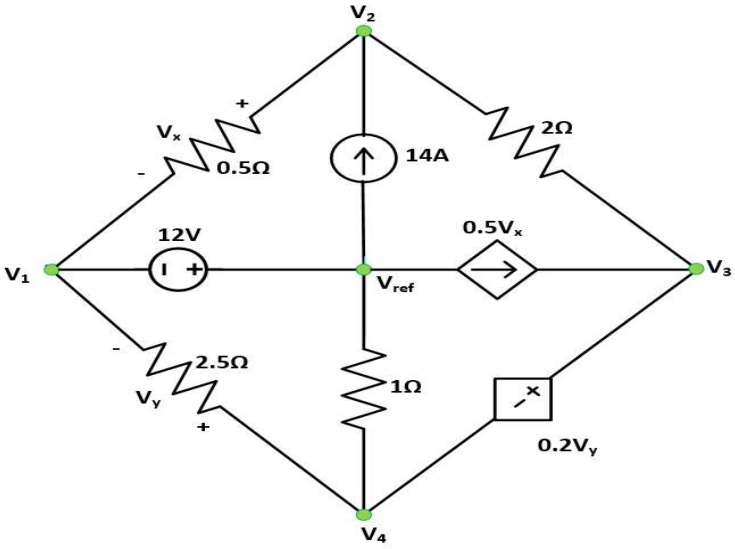

Fig.2

Q-4 The circuit shown in Fig.3 represents an unbalanced bridge. If the galvanometer has a resistance of 40 Ohms, find the current through the galvanometer. (Hint: Use Thevenin's equivalent circuit)

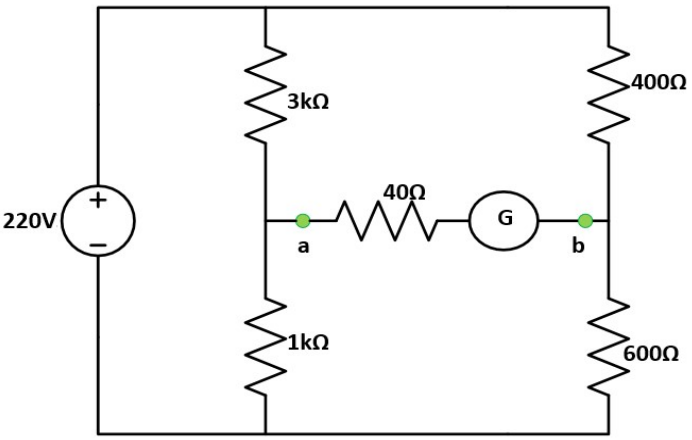

Fig.3