

Vivekanand Education Society's Institute of Technology

Internal Assessment Test -1

Class: F.E.

Subject: B.E.E.

Date: 9th Sept. 2015

Time: 3:00 pm to 4:00 pm

Max. Marks: 20

Note the following instructions.

1. All questions are compulsory.
2. Draw neat diagrams wherever necessary.
3. Write everything in ink only (no pencil).
4. Assume data, if missing, with justification.

ODD

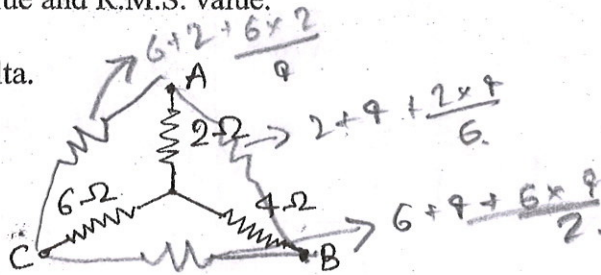
Q.1 Attempt any five out of six

[2x5]

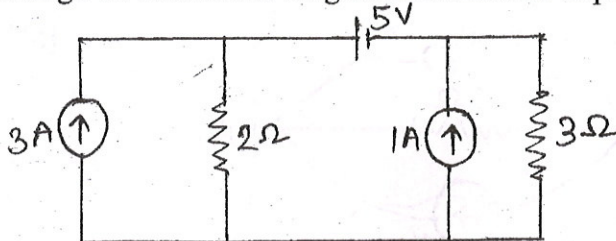
a) State Thevenin's Theorem.

b) Define Average value and R.M.S. value.

c) Find equivalent Delta.

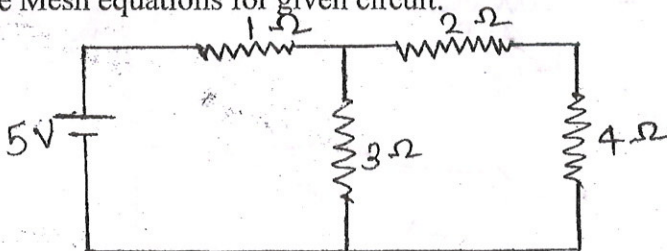


d) Convert given circuit into single current source in parallel with single resistance.



e) Write steps to apply Norton's Theorem.

f) Write Mesh equations for given circuit.

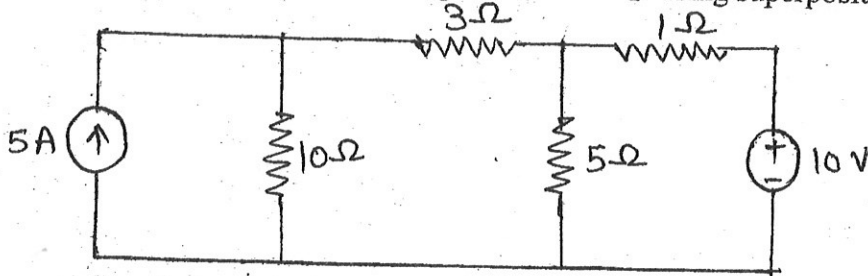


Q.2

a) State & Derive condition for maximum power transfer through the network. [5]

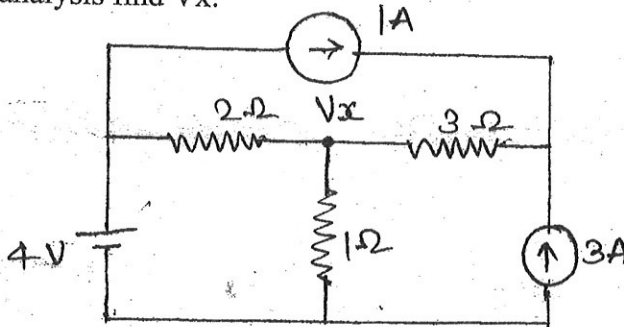
OR

b) For the network given find current through 3ohm resistor using superposition theorem. [5]



Q.3

a) Using Nodal analysis find V_x . [5]



OR

b) Find Norton's equivalent circuit for the given network. [5]

