

Indian Institute of Information Technology, Allahabad

ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

Course Name: Electrical Engineering

EXPERIMENT NO: 5

Objective:

- To implement and verify reciprocity theorem.

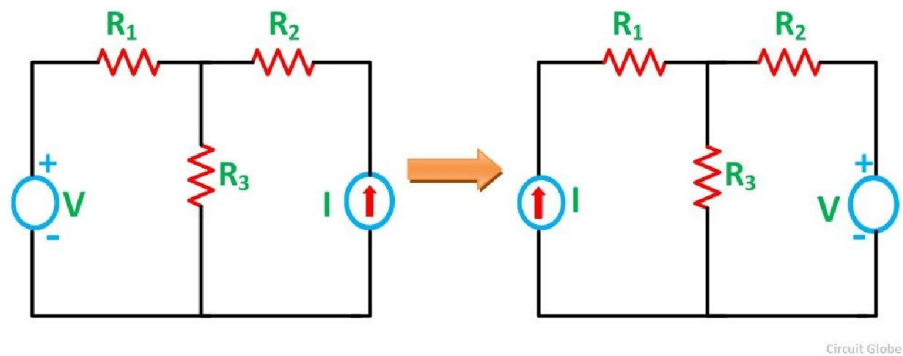
Materials/ Component Required :

Bread board, Digital Multi meter, Resistance, DC Power supply, Connecting Wires

Theory:

The reciprocity theorem states that if an emf E in one branch of a reciprocal network produces a current I in another, then if the emf E is moved from the first to the second branch, it will cause the same current in the first branch, where the emf has been replaced by a short circuit

Circuit Diagram:



Observation Table:

Value of current I

Value of voltage V

Calculation:

Result:

Precautions:

- a) Connections should be verified before clicking run button.
- b) The resistance to be chosen should be in K ohm range.
- c) Best performance is being obtained within 50Hz to 1Mhz.