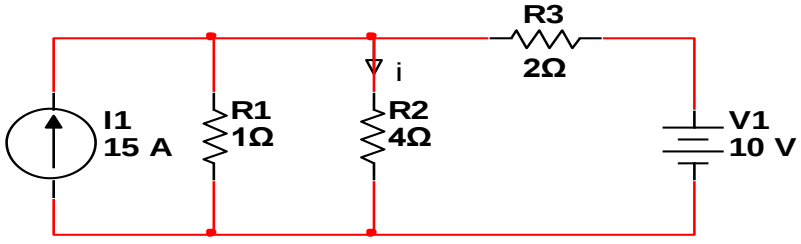
Chandigarh Engineering College Landran, Mohali
Department of Applied Sciences

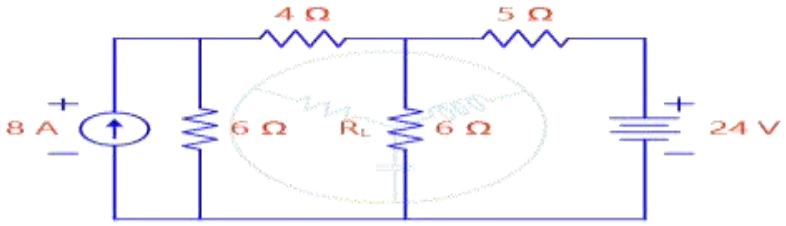
Assignment No 1 **Max Marks:** 10

Subject and Subject code: BEE (BTEE-101-18) **Semester:** Ist

Date on which assignment given: **Date of submission of assignment :**

Course Outcomes: Student will be able to
CO1: differentiate circuits based on their composition, terminology and their mathematical analysis.
CO2: analyze the behavior of electrical circuits based on alternating currents as their power supply; solve AC circuits and their mathematical analysis.
CO3: understand the basic magnetic circuit; construction as well as working principle of transformer.
CO4: study the working principles of various electrical machines such as three- phase induction motor, single phase induction motor, dc motor and synchronous generator.
CO5: understand the components of low voltage electrical installations.

Assignment related to COs		**Relevance to CO No.**
Q1.	(i) There are two wires A& B of same material. A is 10 times longer than B and has one fifth of the cross-section as that of B. If the resistance of A is 1 ohm. What is the resistance of B? (2 marks)	CO-1
	(ii) State Superposition theorem. (2 marks)	
Q2.	Using the Nodal Analysis, determine the current through 4Ω resistor and find the power dissipated by 4Ω resistor in fig. (3 marks) 	CO-1

Q3.	Calculate the current through 6Ω load resistor using thevenin's theorem and verify the result with Norton's theorem. (3 Marks) 	CO-1