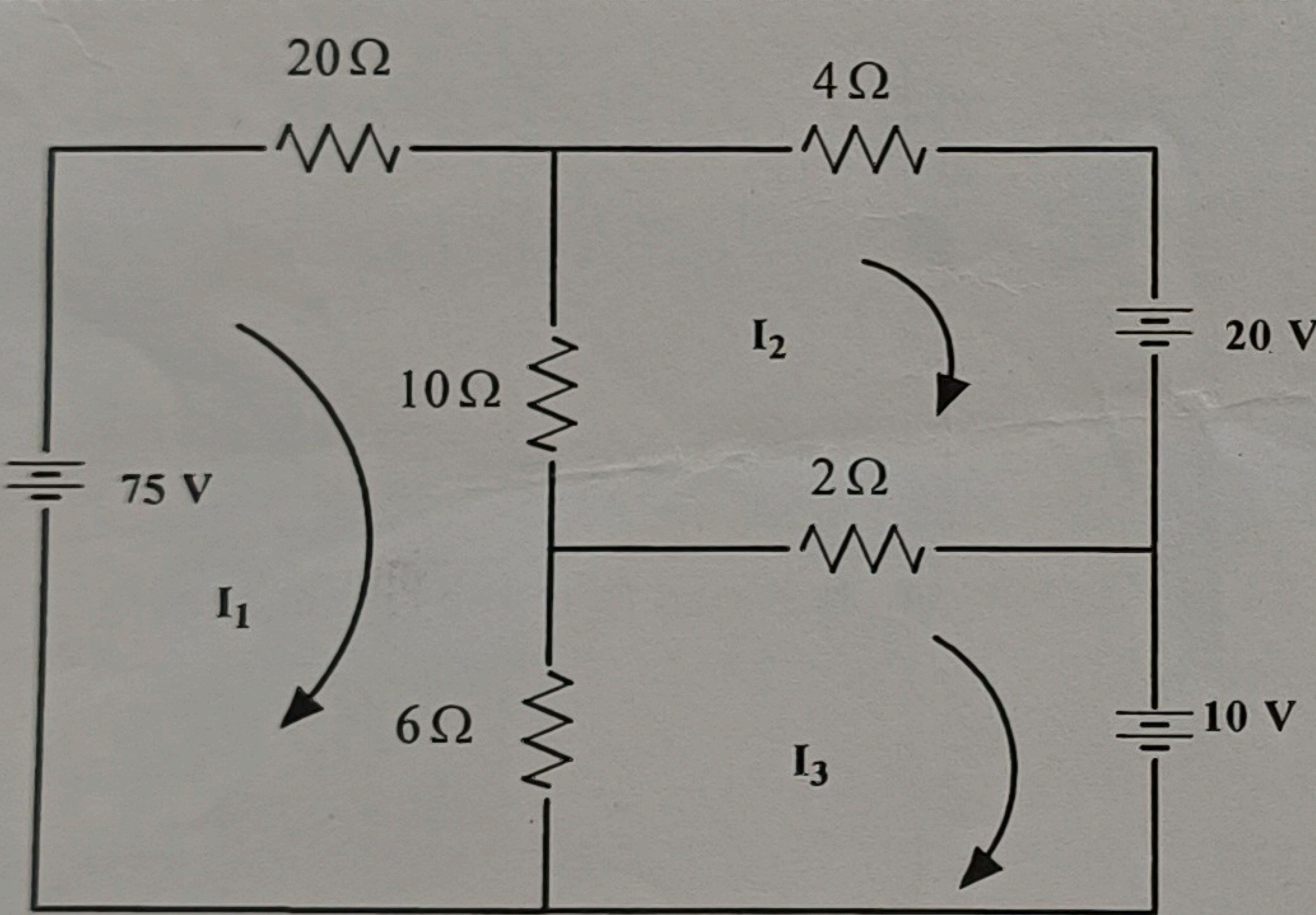
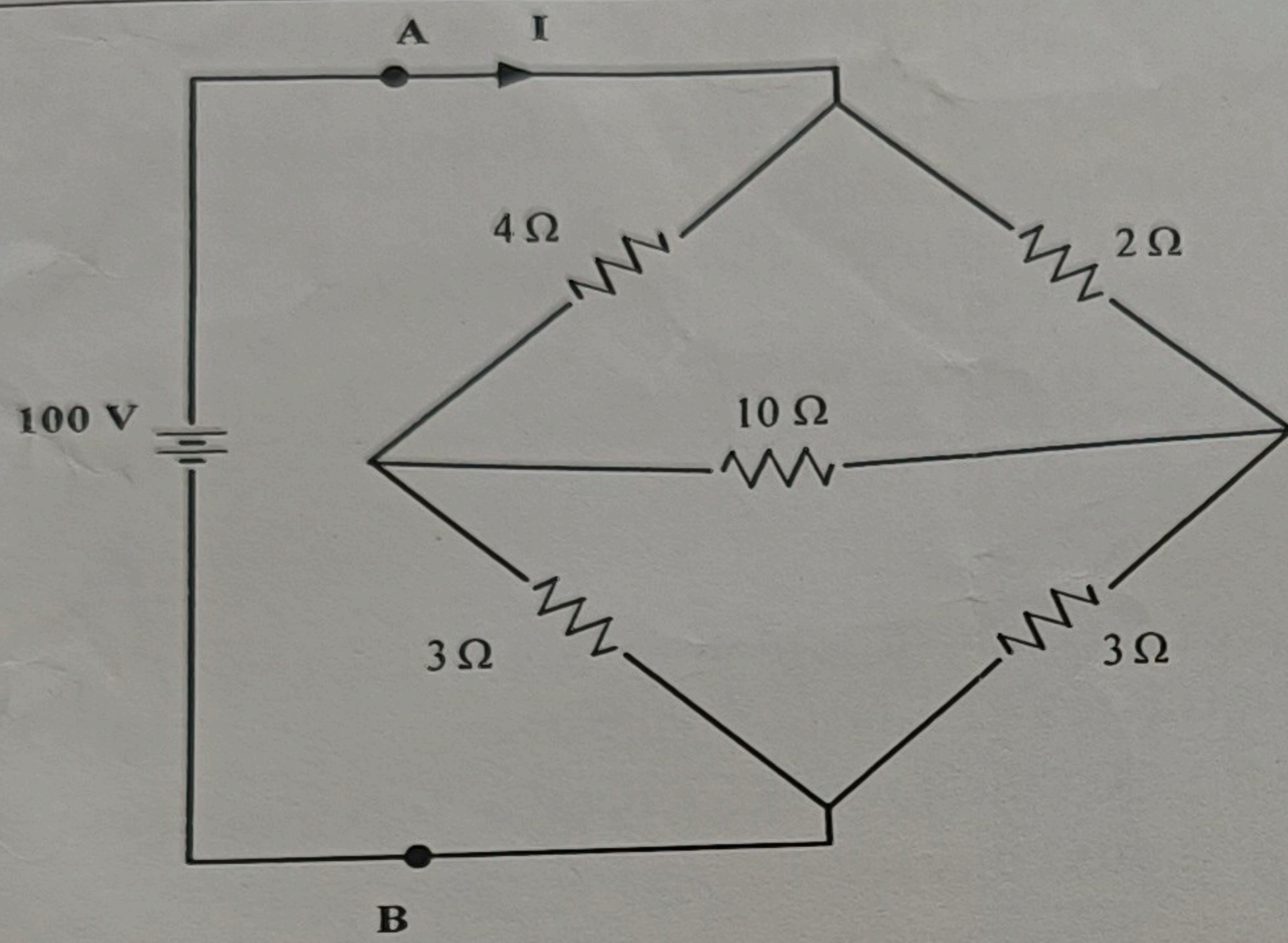


Programme Name & Branch : B Tech & Common to all branches offered in B1 slot
Course Code and Course Name : BEEE102L & Basic Electrical and Electronics Engineering
Faculty Name(s) : Dr. K Sathish Kumar, Dr. R. Gnanavignesh, Dr. Albert Alexander, Dr. P Anbarasan, Dr. Kasi Venkatramana
Class Number(s) : VL2024250504499
Date of Examination : 28/01/2025
Exam Duration : 90 minutes **Maximum Marks: 50**

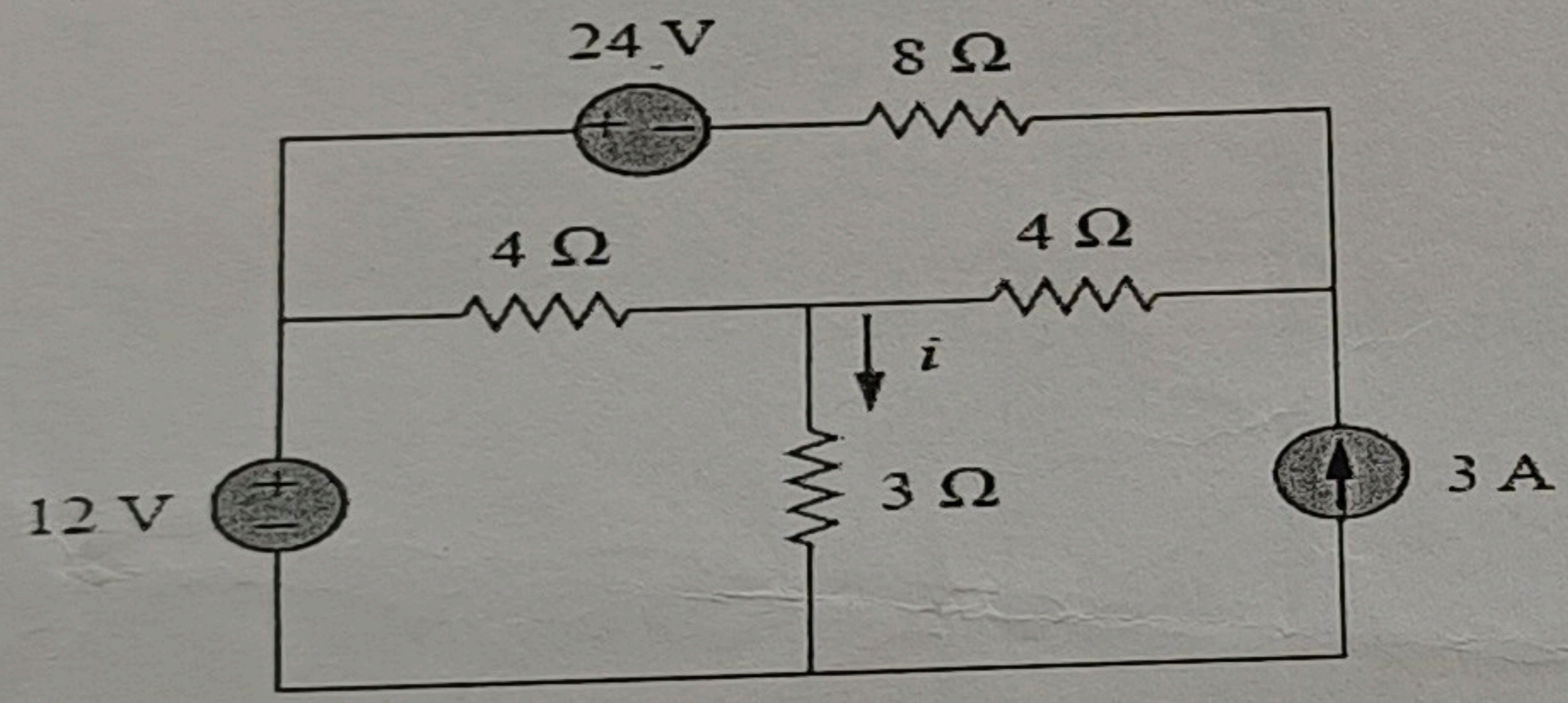
General instruction(s):

- Answer All Questions
- M - Max mark; CO – Course Outcome; BL – Blooms Taxonomy Level (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)
- Course Outcomes (Type the CO statements covered in this question paper. Use the CO number as per the syllabus copy)
CO1. Evaluate DC and AC circuit parameters using various laws and theorems

Q. No	Question	M	CO	BL
1.	Calculate the mesh currents for the circuit shown below. <div style="text-align: center; margin-top: 10px;">  </div>	10	1	3
2.	Obtain the equivalent resistance R_{AB} for the circuit shown below using star-delta transformation and calculate the current "I".	10	1	3

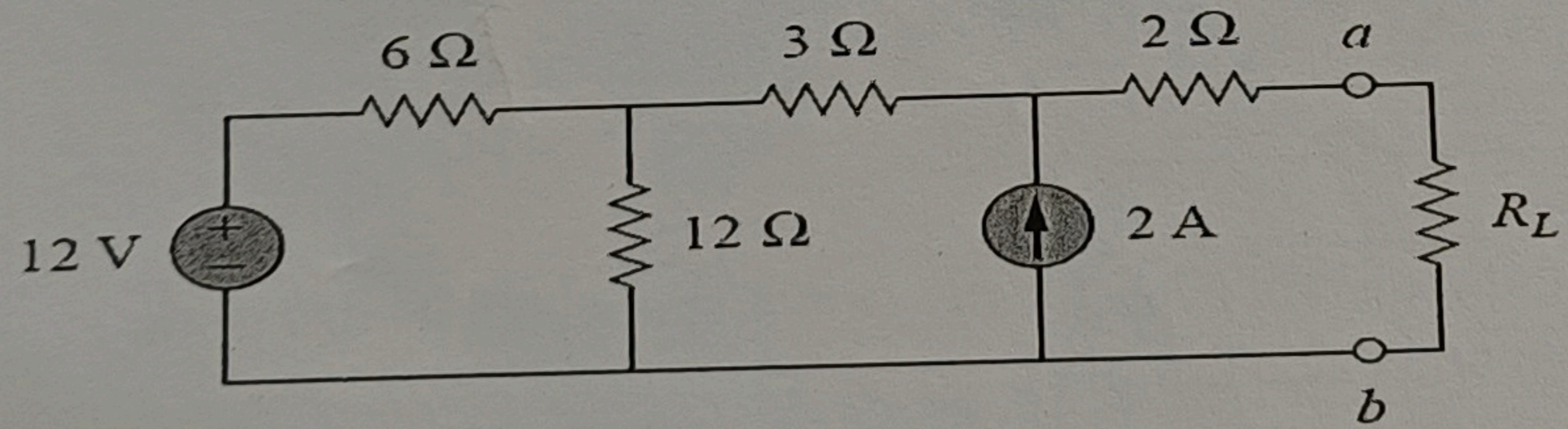


3. Use superposition theorem to find current i for the circuit given below



10 1 3

4. Determine the maximum power delivered to the load R_L in the circuit shown below



10 1 3

5. A coil of inductance 318.3 mH and negligible resistance is connected in series with a 200 Ω resistor to a 240 V, 50 Hz supply. Calculate the inductive reactance of coil, the impedance of the circuit, potential drop across each element and its phase angle.

10 1 4