Daffodil International University

Department of Computer Science and Engineering
Faculty of Science and Information Technology
Mid Term Examination, Semester: Fall - 2019

Time: 1.5 Hours   Full Marks: 25

Answer all the questions

Q1. State and explain Kirchhoff's voltage law (KVL).   5

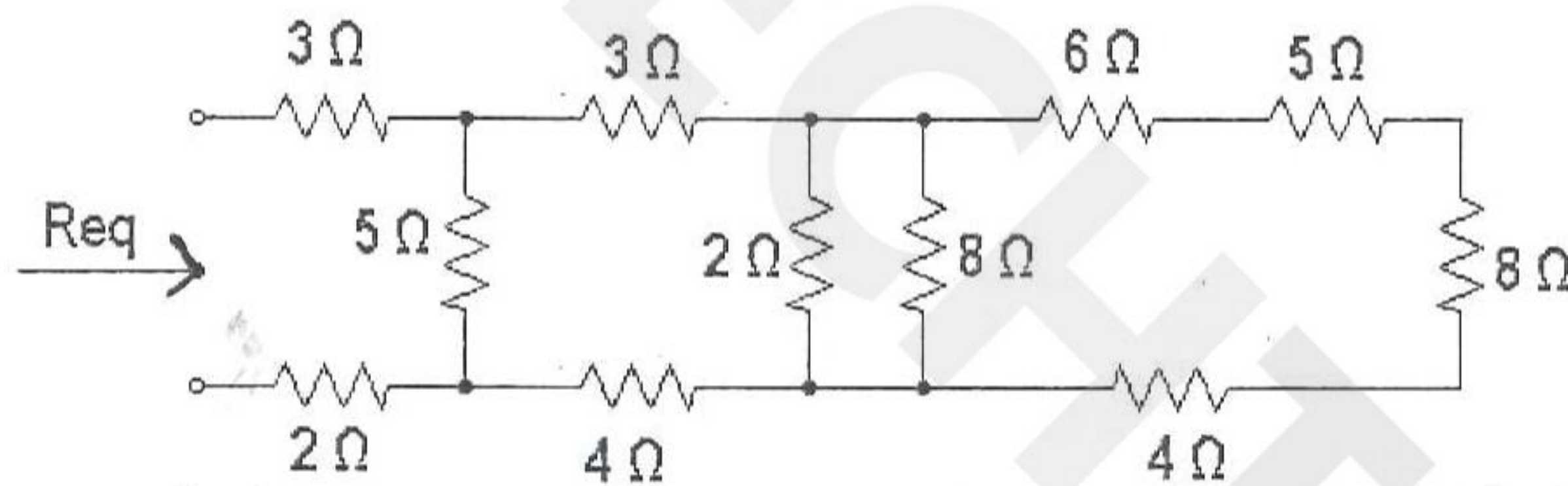**Q2.** Calculate the equivalent resistance R_{eq} for the circuit of figure 1.   5

Figure 1

Q3. Determine Current **I, i1, i2, i3, i4** for the circuit of figure 2.   5
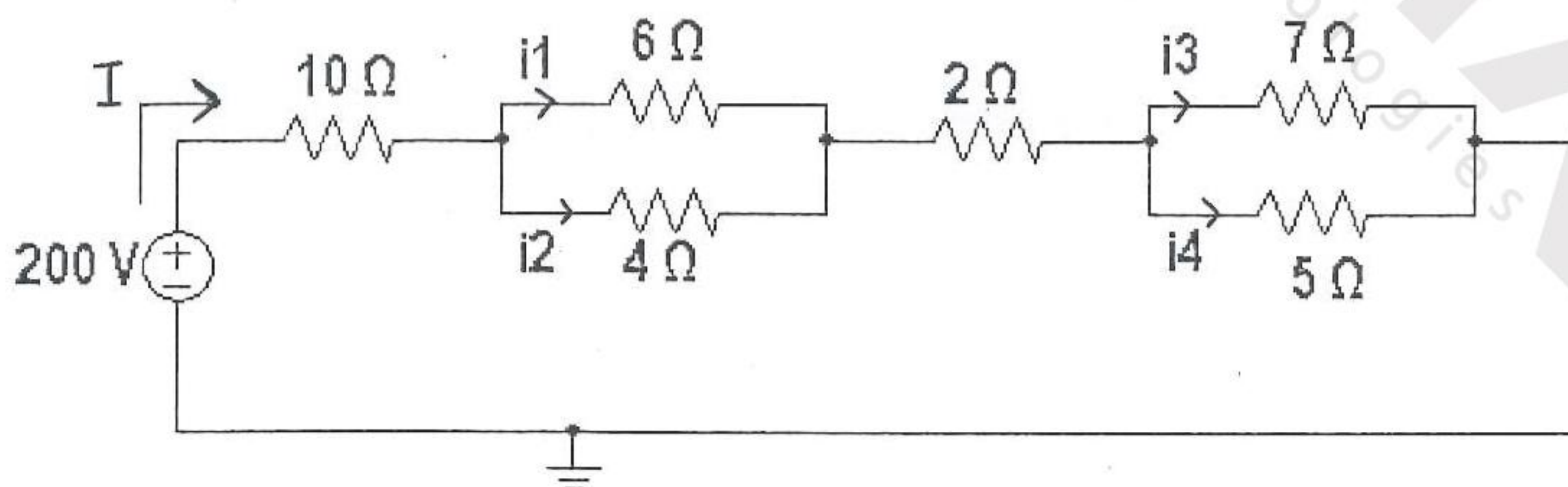

Figure 2

Q4. Using nodal analysis, find out the node voltages for the circuit of figure 3.   5
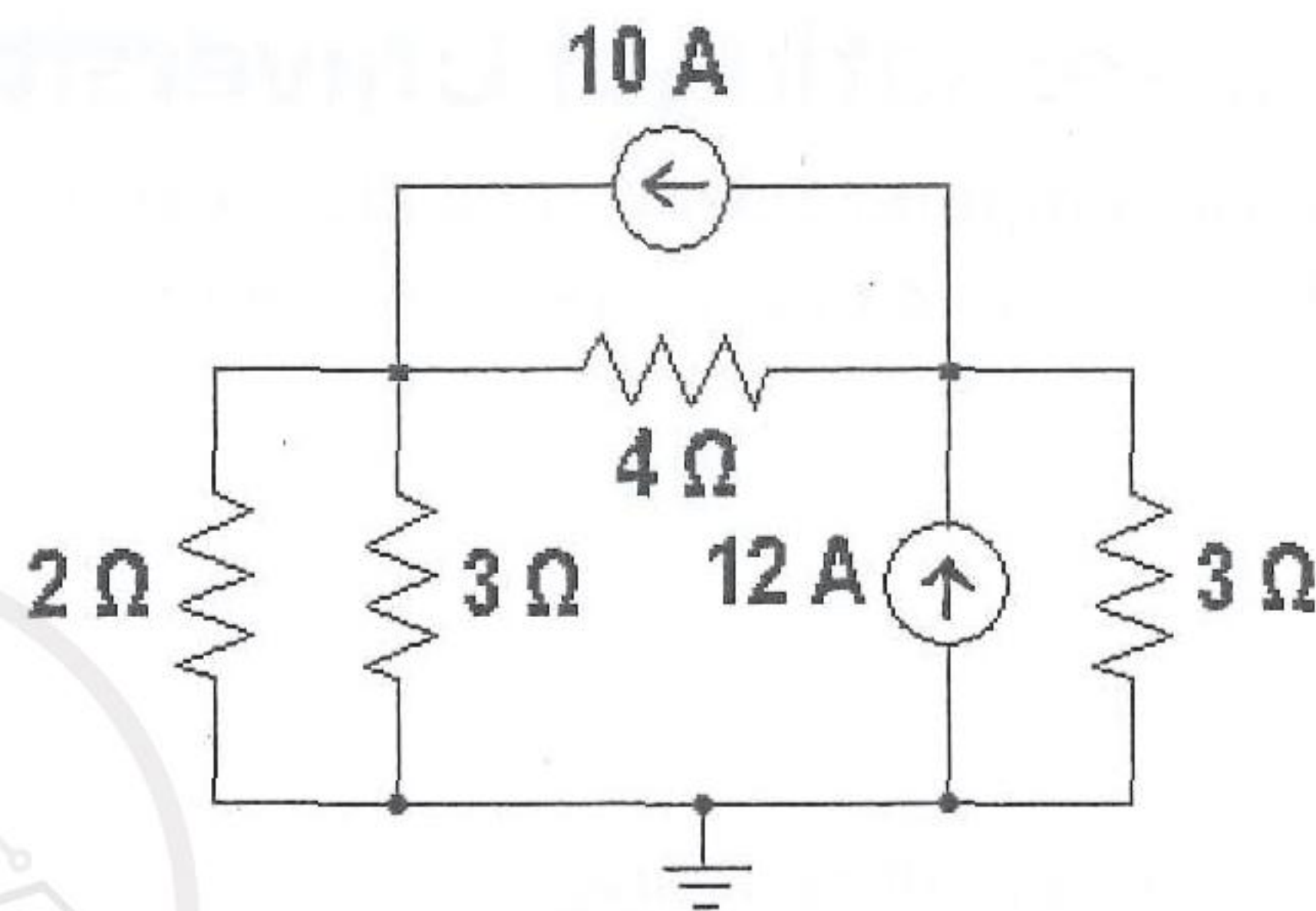

Figure 3

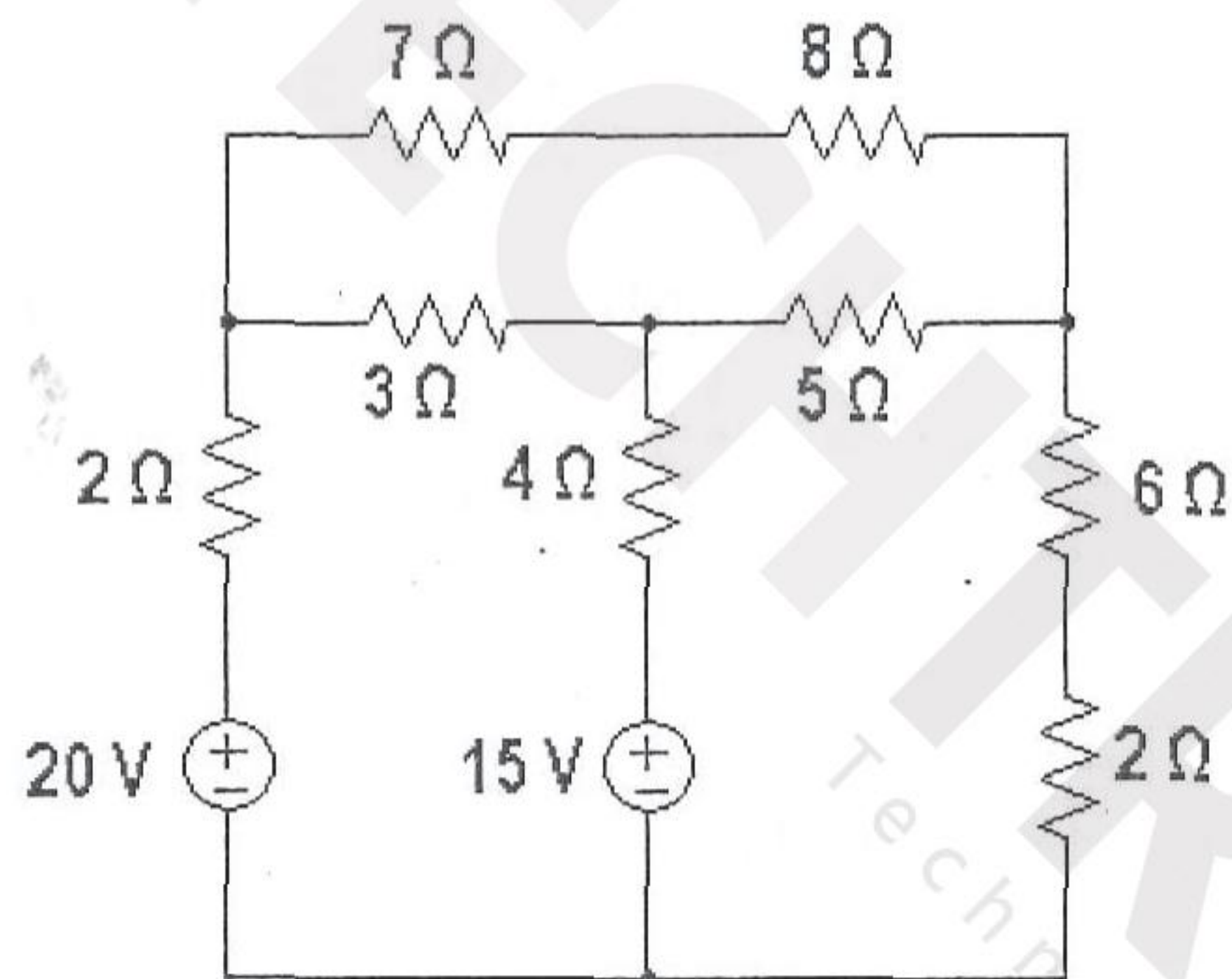**Q5.** Using Mesh analysis, determine loop currents for the circuit of figure 4.   5

Figure 4