Name	
Reg. No	
Marks / Grade	

EXPERIMENT NO. 2

Colour coding Equivalent Resistance Measurement

Objective:

To understand how to find the equivalent resistance of a given circuit experimentally and compare it with theoretical result.

Apparatus:

DMM

Resistors

Breadboard

Connecting wires.

Prerequisite:

Before coming to the lab, student should practice how to calculate equivalent resistance of a given circuit.

Circuit diagram:

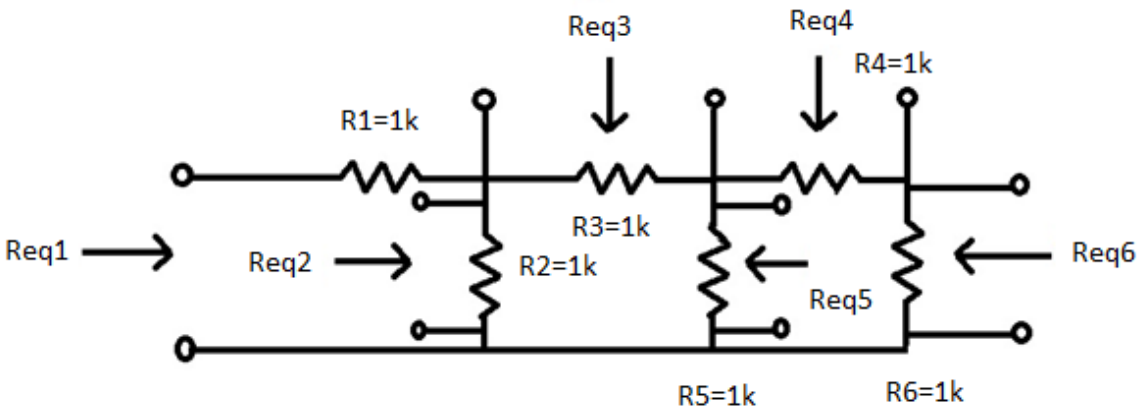

Figure 2.1

Procedure:

1. Connect the circuit on the bread board according to circuit diagram.
2. Measure the equivalent resistances at all circled nodes enclosing Req and write their values in the table.
3. Now calculate the equivalent resistances theoretically and write these values in the corresponding empty space in the table 2.1.
4. Compare both values and write your comments on the end of manual.

Safety Precautions

- ✓ Ask your instructor to check the circuit before turning on the power.
- ✓ Set the DMM on the resistance sign and select appropriate range.
- ✓ Do not connect your hands directly to the ends of resistors at the time of measurement so that your body resistance should not come parallel to resistance.

Table (observations):

Equivalent Resistance	Measured value	Calculated value

Table 2.1

Attach A4 pages for the calculations of the equivalent resistances.

Start with drawing the circuit along with the corresponding resistance values. Ignore the values shown in figure 2.1. Use the values of the resistances that you used in the lab.

Summary: