**Lab - 3 Datasheet**

**Circuit Analysis – I**

|  |  |
| --- | --- |
| Name of Student(s): |  |
| Date Lab Performed: |  |

**Table 1: Resistance Measurement:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Resistors** | | | |
| **R1** | **R2** | **R3** | **R4** |
| **Calculated Value**  (from Prelab Table 1) |  |  |  |  |
| **Measured Value** (using DMM at Lab) |  |  |  |  |

**Note:** The resistance, voltage and current values in all tables must be written with units.

**Table 2: Voltage and Current Measurements – Series Circuit:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Calculated Value**  (from Prelab Table 2) | **Measured Value**  (using DMM at Lab) | **% error** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Note:** The Measured value must be measured using the DMM and not read from the power supply unit’s display.

**Table 3: Voltage and Current Measurements – Parallel Circuit:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Calculated Value**  (from Prelab Table 2) | **Measured Value**  (using DMM at Lab) | **% error** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Note:** The Measured value must be measured using the DMM and not read from the power supply unit’s display.

Following, within the given space, show step-by-step **%error calculations** for , and :

**Note:** You will still need to do %error calculations for other parameters and complete Table 1 and Table 2; but you do not need to show all detailed calculations here. Show calculations only for , and .

|  |
| --- |
|  |

**Conclusions:** (min 150 words. Max 300 words)

**Lab-3 Datasheet Submission Requirements**

* Make sure to write a thoughtful conclusion in the **Conclusions** section summarizing your key observations and learnings from this lab. Conclusions should be at least **150 words** long. Conclusions section is worth 5 points (the lab is worth total 100 points – Prelab: 30 pts, Hands-on Lab: 70 pts).
* **File format:** Once this Datasheet is complete, **save/convert** this word file **as a .pdf file** having a filename as: “Lab-3 Datasheet\_FirstName of Student 1\_FirstName of Student 2.pdf”. For example, if name of the two students performing the lab in a group are Tom Cruz and Morgan Freeman, respectively, then the Lab-3 Datasheet file should have the following name: “Lab-3 Datasheet\_Tom\_Morgan.pdf”.
* Check with your lab instructor about specific instructions on how to submit your Lab-3 Datasheet for assessment and grading.