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**Pre-lab Assignment EE2112 – Lab 2 Submission Sheet**

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1. 1. KVL:
   2. KCL:

2.

Table 2: Resistance Measurements (Measurements, and Percent Error)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Nominal  Resistance(kOhms) | Measured  Resistance(kOhm) | Voltage  VR(V) | Current  IR(mA) | (KΩ) |
| R1 |  |  |  |  |  |
| R2 |  |  |  |  |  |
| R3 |  |  |  |  |  |
| R4 |  |  |  |  |  |

Table 3: Kirchhoff's Voltage Law: Sum of Voltage drops around loops.

|  |  |  |  |
| --- | --- | --- | --- |
| Measured  Voltage(V) | Loop 1 Voltages  with polarity(V) | Loop 2 Voltages  with polarity(V) | Loop 3 Voltages  with polarity(V) |
| V­dc |  |  |  |
| VR1 |  |  |  |
| VR2 |  |  |  |
| VR3 |  |  |  |
| VR4 |  |  |  |
| Total |  |  |  |

Table 4: Kirchhoff's Current Law: Sum of current into node loops.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Node # | Isources | IR1 | IR2 | IR3 | I­R4 | IR5 | Sum |
| Node 0 |  |  |  |  |  |  |  |
| Node 1 |  |  |  |  |  |  |  |
| Node 2 |  |  |  |  |  |  |  |
| Node 3 |  |  |  |  |  |  |  |

Table 5: Resistance Measurements (Measurements, Ohm's Law and percent error)

|  |  |  |  |
| --- | --- | --- | --- |
| Nominal Resistance(KΩ) | Measured  Resistance(KΩ) | (KΩ) | Percent Error% |
| 3.3 |  |  |  |
| 3.6 |  |  |  |
| 4.7 |  |  |  |
| 5.6 |  |  |  |

Table 6: Current and Voltage Measurement in Multi-SIM Simulation

|  |  |  |  |
| --- | --- | --- | --- |
| Nominal Resistance(KΩ) | VR (V) | IR | % Diff |
| 3.3 |  |  |  |
| 3.6 |  |  |  |
| 4.7 |  |  |  |
| 5.6 |  |  |  |