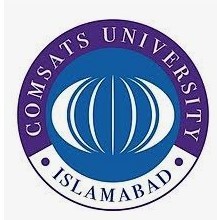
**Electric Circuit Analysis I EEE-121**

Lab 03: Resistor Combinations - Series and Parallel



|  |  |
| --- | --- |
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Resistances in parallel

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Value of R1 (Ω) | Value of R2 (Ω) | Value of R3 (Ω) | Req calculated(Ω) | Req (Ω) measured |
| 100 | 10000 | 18000 | 98.468 | 99.200 |
| iT (mA) calculated | iT (mA) measured | I1 (mA) measured | I2 (mA) measured | I3 (mA) measured |
| 50.78 | 48.300 | 47.600 | 0.445 | 0.263 |
| iT (mA) Simulated |  | I1 (mA) Simulated | I2 (mA) Simulated | I3 (mA) Simulated |
| 50.778 |  | 50.956 | 0.500 | 0.278 |

Resistances in Series

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Value of R1 (Ω) | Value of R2 (Ω) | Value of R3 (Ω) | Req calculated(Ω) | Req measured(Ω) |
| 100 | 1000 | 1800 | 2900 | 2898 |
| iT (mA) calculated | iT (mA) measured | V1 (V) measured | V2 (V) measured | V3 (V) measured |
| 1.724 | 1.647 | 0.171 | 1.702 | 3.049 |
| iT (mA) Simulaed |  | V1 (V)  Simulated | V2 (V)  Simulated | V3 (V)  Simulated |
| 1.724 |  | 0.172 | 1.724 | 3.103 |