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| **I**  **Course Name:** | **Elements of Electrical and Electronics Engineering** | **Semester:** | **I** |
| **Date of Performance:** | **30 /12 / 2022** | **Batch No:** | **C3-3** |
| **Faculty Name:** | **Annu Abraham** | **Roll No:** | **16010122221** |
| **Faculty Sign & Date:** |  | **Grade/Marks:** | **/ 25** |

**Experiment No: 8**

**Title:** **Measurement of Power using Two Wattmeter Method**

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| **Aim and Objective of the Experiment:** |
| * To measure the power of three phase power using Two Wattmeter Method |

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| **COs to be achieved:** |
| **CO1:** Analyze resistive networks excited by DC sources using various network theorems. |

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| **Circuit Diagram/ Block Diagram:** |
| **R1 = 15 ohm, L1=31.85 mH,** |

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| **Stepwise-Procedure:** |
| 1. 1.Connect the circuit as shown in circuit diagram 2. 2. Increase the load and note down the reading VL,IL,W1 and W2 3. 3. Practically you will obtain total power W=W1+W2 4. 4. Theoretically power is measured by using formula P=√3VLILcosϕ,   using cosϕ=1(unity) for resistive load. |

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| **Observation Table:**   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Sr.no** | **VL V** | **IL A** | | **W1 KW** | | **W2 KW** | | **W= (W1+W2 )KW** | | **P = √3VLILCOSϕ KW** | |  |  | **TH** | **PR** | **TH** | **PR** | **TH** | **PR** | **TH** | **PR** |  | | 1 | 397 | 0.8 | 0.8 | 280 | 280 | 320 | 320 | 600 | 600 | 550.032 | | **2** | 396 | 1.4 | 1.4 | 440 | 440 | 660 | 660 | 1100 | 1100 | 960.2208 | | **3** |  |  |  |  |  |  |  |  |  |  | | **4** |  |  |  |  |  |  |  |  |  |  | |
| Screenshot of Output:  C:\Users\Admin\Downloads\WhatsApp Image 2023-01-11 at 8.16.12 AM.jpeg |

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| **Conclusion:** |
| We understood how to find the power using two watt meter |

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| **Signature of faculty in-charge with Date:** |