

Unit I: Assessment: Assignments

Assignment – Lecture 27

1. A non-inductive resistor is connected in series with a coil and capacitor of $25.5\mu\text{F}$. The current in the circuit is 0.4A and the potential difference across the non-inductive resistor is 20V, across the coil is 35V, across the capacitor is 50V and across the combination of non-inductive resistor and coil is 45V. Find the resistance and inductance of the coil. Also find the applied voltage, frequency and the power dissipated in the coil and the whole circuit.

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