



Sheet (2)

1-A 0-25 A ammeter has a guaranteed accuracy of 1 percent of full scale reading. The current measured by this instrument is 10 A. Determine the limiting error in Percentage.

2-The inductance of an inductor is specified as $20\text{ H} \pm 5\text{ percent}$ by a manufacturer. Determine the limits of inductance between which it is guaranteed.

3- A 0-250 V voltmeter has a guaranteed accuracy of 2% of full-scale reading. The voltage measured by the voltmeter is 150 volts. Determine the limiting error in percentage.

4- The measurand value of a resistance is $10.25\ \Omega$, whereas its value is $10.22\ \Omega$. Determine the absolute error of the measurement.

5- The measured value of a capacitor is $205.3\ \mu\text{F}$, whereas its true value is $201.4\ \mu\text{F}$. Determine the relative error.

6- A wattmeter reads 25.34 watts. The absolute error in the measurement is -0.11 watt . Determine the true value of power.

Best Wishes

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