

[Assignment NO-3 for EE-4th Sem. Students] [Sub: EEM]. Amul

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Ques $\Rightarrow$ (1) Two Resistors are given as $R_1 = 150 \pm 2\%$ or $(150 \pm 2\Omega)$, $R_2 = 100 \pm 2\%$ ($100 \pm 2\Omega$).

(i) when they are connected in series find the equivalent resistance.

(ii) Find $|R_1 - R_2|$, (iii) Find $R_1 R_2$ (iv) $\frac{R_1}{R_2}$

(2) Two Resistors are given as $R_1 = 100 \pm 6\Omega = (100 \pm 6\%)$, $R_2 = (50 \pm 2\Omega) = (50 \pm 4\%)$

Find (i) $R_1 + R_2$ (ii) $R_1 - R_2$ (iii) $R_1 R_2$ (iv) $\frac{R_1}{R_2}$

(3) The input of electrical machine (answer of que no ② of assignment No. 1's last statement) is given as $5000 \pm 2\%$. (i) Find the loss of machine (ii) Find the efficiency if the output is given as $5000 \pm 2\%$.

(4) 3 Resistors are given as $R_1 = 50 \pm 2\%$, $R_2 = 37\% \pm 2\%$, $R_3 = 75\% \pm 2\%$.

Find the equivalent Resistance (i) when connected in series (ii) when in Π^r .

Amul
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