

## Noções de Sistemas e Sinais: resultados

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1. -  $V_1 = 5.00 \text{ Vpp}$  ;  $V_{1med} = -0.50 \text{ V}$  ;  $V_1 = 1.58 \text{ Vrms}$  ;  $\delta = 10 \%$ .
2. -  $V = 3.00 \text{ Vpp}$  ;  $V_{med} = 1.50 \text{ V}$  ;  $V = 1.73 \text{ Vrms}$ .
3. -  $\omega = 628 \text{ rad/s}$  ;  $f = 100 \text{ Hz}$  ;  $T = 10 \text{ ms}$  ;  $V = 300 \text{ Vpp}$  ;  $V = 106 \text{ Vrms}$  ;  $t_{max} = 1 \text{ ms}$  ;  $P_R = 225 \text{ W}$ .
4. -  $W_{C1} = 72 \text{ J}$  ;  $W_{C2} = 36 \text{ J}$  ;  $W_{L1} = 8 \text{ J}$  ;  $W_{L2} = 4 \text{ J}$ .
5. -  $R = 4.33 \text{ M}\Omega$ .
6. -  $V_C(2) = 8.65 \text{ V}$  ;  $V_C(4) = 1.17 \text{ V}$ .
7. -  $V_2 = 3.16 \text{ V}$  ;  $I_{R1} = 684 \mu\text{A}$  ;  $I_{C1} = 184 \mu\text{A}$  ;  $W_{C2} = 0.5 \mu\text{J}$ .
8. -  $t_f = 4.61 - 0.21 = 4.4 \mu\text{s}$ .
9. -  $t(1s) = 5.1 \text{ V}$  ;  $t(2s) = 1.9 \text{ V}$ .
- 10.-  $i_R(t) = 0.16 \cos(200 \pi t - 81^\circ)$ .
- 11.-  $L = 10 \text{ mH}$ .
- 12.-  $f = 10.6 \text{ Hz}$ .
- 13.-  $V_o \approx 1 \text{ Veff}$     $\Phi \approx -90^\circ$ .